THE EVOLUTION OF FULL-TIME VOCATIONAL EDUCATION FOR WHITE PUPILS IN THE CAPE PROVINCE and CONTEMPORARY PROBLEMS RELATED THEREWITH

by

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CONTENTS

Preface

St. Paul, the Apostle, writing to the Jewish Christians, in one part of his epistle reminds them " ..... but call to remembrance the former days ..... ." [1] And in very recent times Robert V. Daniels explains the importance of this advice. "History is the record of all experience" he wrote. "The present is only a fleeting instant, and everything we are conscious of is already in the past, has already become a part of history. Intelligent action is based on learning from past experience and thus it is in history of one sort or another that we must seek whatever answers we may hope to find about the conduct of human affairs. ..... the historian can conceive of historical "trends" or "processes" where one event leads to another in a more or less logical way. Thinking in such terms is very important when it comes to understanding how the present ..... has grown out of the more remote past. The same approach is the only way in which we can rationally anticipate the future - to observe the processes of change or development that appear to have been going on up to now and to project them into the future, i.e., to guess what will happen if they continue in the same way." [2]

Vocationally-directed education must of necessity claim a larger part in the whole educational planning of the future. This is a world trend and, apart from any other merit that it may possess, is forced upon us by the necessity of trying to maintain the tempo of our industrial development and ensure our economic future. The implications of a properly-planned, differentiated system of full-time, vocationally-directed secondary education include this essential, that any one system - national or provincial - be undivided, that is, that it be controlled by one authority so that pupils may be guided into correct channels with no other thought than that they be given equal educational

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1. Epistle to the Hebrews. Chapter 10, verse 32.
2. Robert V. Daniels. "Studying History. How and Why". Englewood Cliffs, New Jersey. Prentice-Hall Inc. 1966. pp. 4 and 5.

opportunity. This, it is to be supposed, is why on 1st. April, 1968, the two types of proclaimed vocational schools, the technical and the commercial high schools, together with the housecraft high schools, were returned to the control of the provincial education departments from that of the Department of Higher Education.

As far as the Cape Province was concerned this involved the transfer of one inspector to act as education planner for the transferred schools, and with the help of other inspectors subsequently appointed, to look after the interests of these and other vocational schools. This fell to my lot and it soon became apparent that the generations of educationists which had been responsible for the beginnings of the system of vocational education had passed from the scene and only a very small number of us who had grown up with these schools remained. This became obvious from the many questions that were asked about these schools by colleagues in the Cape Education Department. Their origins were forgotten and hence many of the reasons for their mode of administration. This was probably my first motivation for attempting to collect the histories of the individual schools, collate them and record them in a suitable manner.

The second motive was to attempt to suggest how the system should become enlarged to include a much greater measure of vocationally-directed education, suitably differentiated, and catering for the needs of the individual as well as for those of society as a whole.

The Cape Province has problems peculiar to itself - geographical in essence but requiring separate consideration. By far the greatest of these is the vastness of the province and the extent of the Karoo. This vast semi-desert has very little provision for vocationally-directed education and an economically very wasteful system of ordinary primary and secondary education. These facts present a challenge as well as a problem. To say that a full solution to the problem has been presented in this thesis would be an exaggeration. This will require time and money and a very great deal of research.

The first six chapters are historical. Chapter 1 examines the reasons why full-time secondary education became divided between provincial and central government control and how it became re-unified.

Chapter 11 covers the history of the industrial, trade and technical high schools of the Province and ends by stating a serious problem of early school leaving in the present technical high schools and proposing a solution to this problem.

Chapter 111 contains the origins of the housecraft high schools, their development to their present condition and a forecast of their future.

Chapter 1V deals with the history of the commercial high schools, which is much more recent and inter alia discusses the rapidly growing demand for full-time, secondary commercial education - an inevitable accompaniment of industrialization.

Chapter V is concerned with the agricultural high schools, still surprisingly small in number despite the climatic conditions which make farming a somewhat hazardous occupation - something which has been of concern to leading figures in our national life for several generations.

Chapter V1 is recent history - that of the special secondary schools which are really vocational schools catering for selected mentally-retarded pupils, and turning many of them into useful, purposeful members of society.

Thereafter the chapters deal more with the future. Chapter V11 describes the somewhat wasteful system of full-time secondary education existing at present, particularly in the thinly populated areas of the province.

Chapter V111 is a discussion of the curriculum which might be suitable for the various types of schools. It deals with the need for more vocational and vocationally-directed education, and then goes on to discuss the purpose of a curriculum, stressing the need of a general, formative education as an essential component of vocationally-directed studies.

Chapter IX contains an examination of some aspects of comprehensive schools because these seem to be developing in many overseas lands and there may be lessons to be learnt from such an examination.

Chapter X is a discussion of the types of school which may be found necessary in the Cape Province if equal educational opportunity is to be given to all pupils who can benefit from secondary education. As was explained earlier, this chapter does not really propose a solution, except to suggest that comprehensive schooling as it is understood in England is probably not the answer here, although multi-lateral schools may be. A conclusion reached is that schools will have to be much larger than those commonly found in the rural areas of the Province if effective differentiation is to be provided. Another conclusion is that agricultural high schools will have to remain separate entities because of the necessity for a farm as a part of the school, which factor immediately sets a limit on the number of pupils that can be accommodated. Other factors which affect the composition of multi-lateral schools are discussed and a distinction drawn between the conditions obtaining in urban and rural areas.

Chapter XI is a brief summary of what appears to be the cogent points and an attempt to support conclusions reached by very recent world opinion.

Hence the procedure suggested by Daniels has been followed. First the history of the topic and then the attempt to see if lessons taught by success and by failure may lead to giving expression to the most recent educational thought, and result in a better gamut of full-time secondary education.

Acknowledgements

A thesis such as this containing so much local history could not have been written without the freely-given help of many people. The staff members of the Cape Education Department Library, the South African Library and the Cape Archives have been most co-operative

despite my very frequent requests for their help. Ready assistance has been given, too, by the staff of the Statistics section of the Cape Education Department, the Human SciencesResearch Council and the Education Bureau of the Depantment of National Education.

Mr. R.H. Daneel of the Examinations section of the Department of National Education again willingly supplied information about the National Examinations, past and present, about which subject he is, by virtue of his many years of experience in this section, the acknowledged expert.

Dr. J.J. Op t' Hof, for so many years the Secretary of the Department of Education, Arts and Science and, in the last three years until his retirement on 31st. October, 1970, the Secretary of the Department of Cultural Affairs, readily discussed points of historical interest in respect of schools which he has seen grow since 1926.

Many principals, vice-principals and members of staff of schools were most helpful in producing records from their schools ' archives; Messrs. J.A. Mostert of Augsburg Agricultural High School, A. Teubes of Boland Agricultural High School, H.T. van G. Bekker of Marlow Agricultural High School, and R.G. van Deventer of Oakdale Agricultural High School, Miss Gerber of Adelaide Housecraft High School, St. Elmo Wilken of Daniel Pienaar Technical High School, Uitenhage, A.P. Steyn of Oudtshoorn Technical High School, J.D. Beyers of the Northern Cape Technical and Commercial High School, Kimberley,and R. Grebe of Drostdy Technical High School, Worcester,have been very co-operative and unstinting in their help.

I am indebted to a number of my colleagues in the Cape Education Department - Mr. A.G.N. de Villiers,one of the Inspectors of commercial subjects, Dr. N.J. Heyns and Dr. C.J.J. Reyneke, Head and Deputy-head respectively of the Psychological and Guidance Service, and Dr. J.H.H. Visagie, Deputy-head of the Education Bureau.

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To all of these I express my grateful thanks, but particularly must I do this to my supervisor, Mr. W.T. Ferguson, M.A., M.Ed. of the Faculty of Education, University of Cape Town, not alone for his careful guidance, kindly advice and scholarly criticism but for that strong sense of duty which compelled him to do everything that could be expected from one's supervisor. I was indeed fortunate to have been given the benefit of his knowledge and experience.

CHAPTER 1

Prolegomena

1.1. Introduction

In his annual report for 1967 the last [1] Superintendent-General of Education of the Cape of Good Hope, Dr. G.J.J. Smit, writes "By far the most notable event in this field was the passing of legislation with a view to ending the present system of divided education in the Republic". [2] A little later in this report he sheds further light: "The system of divided control over secondary education in the Republic causes serious problems with regard to the provision of effective differentiation for all school children after standard V. The relatively high percentage of pupils who take the Junior Certificate Course and who fail and leave school proves that the exisiting courses are not sufficiently differentiated, especially in respect of pupils who are less intelligent or who have a particular aptitude for practical work. Schools offering courses of this kind fall under the Department of Education, Arts and Science.[3] Under the Educational Services Act, 1967, the rights, powers and duties in respect of these vocational schools will be transferred to the provincial authorities in 1968. ..... . In the Cape Province 21 vocational schools with more than 9 000 pupils (of whom 3 600 are boarders) and with 580 teachers will therefore be taken over by the Education Department in 1968, in addition to several members of the Inspectorate." [4]

The above extracts introduce three terms which are of contemporary educational interest - divided education, differentiation and vocational schools. Each term requires examination.

1.2. Divided Education

Up to the time of Union, education was a matter for the four Colonies (two of which had been Republics for a long time in the nineteenth century) and each had, to a large extent, developed its own system. The only co-ordinating influence was the fact that the

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1. The name "Superintendent-General of Education" was replaced by "Director of Education" on 1st. April, 1969.
2. Report of the Superintendent-General of Education for the Year 1967. Dept. of Education, Cape of Good Hope. p.5.
3. From 1967 'The Department of Higher Education'.
4. Report of the Superintendent-General of Education, 1967. op. cit. p.9.

sole examining body in South Africa was the University of the Cape of Good Hope which had been established in 1873 as an examining and degree-granting body. This fact has much to do with the problem of differentiated secondary education and will be discussed later. It was entirely natural, therefore, for the Provinces after Union to develop a strong sense of independence. After all, education was developed by them, each in its own way and to suit the apparent local requirements. The Cape Province, being the first part of the country settled by Europeans, has the oldest education system, a fact of which it is, perhaps, inordinately proud. The point which has to be made here, however, is that all forms of education, including vocational education, developed under the care of the four Provinces.

1.2.1. Types of Education

It may be as well, at this point, to define, for the purposes of this thesis, the manner in which education may be classified. There are four main types:

(a) Primary education which is compulsory education given to White children who on or after the first day of January in any year reach the age of seven years. It is, in general, provided by the provincial authorities, who allow children younger than this to enter school. In the Orange Free State, Natal and the Cape Province they may attend from the age of 5 years 6 months. In the Transvaal they may attend from the beginning of the year in which they attain the age of six provided accommodation is available.

Tuition in primary schools is of seven years' duration and ends with the successful completion of the fifth standard.

(b) Secondary Education.

Any satisfactory definition of this term is extremely difficult. In broad terms, children have to attend some type of school until they have attained a certain age, which differs slightly in the various provinces. In the Cape Province the compulsion is until the child attains the age of sixteen or has completed the eighth standard. In the case of a child who attains the age of sixteen before the first day of July, he may leave on his birthday. If the

birthday falls after the thirtieth day of June he must remain at school until the end of the year.

(Since this study is to be confined, as far as possible, to the Cape Province, details in regard to compulsory school attendance in the other provinces will not be given.)

If, however, a pupil leaves school to take up employment in which further education is compulsory, the compulsory age limit may be waived. As an example, a pupil may leave to become apprenticed because part-time secondary education is a condition of apprenticeship. This indicates that there are two ways of obtaining secondary education, full-time and part-time. We are here concerned with full-time secondary education and it was to this type of secondary education that Dr. Smit was referring in his 1967 report; it may be further sub-divided according to the curriculum content, and this sub-division will be discussed later.

(c) Tertiary Education.

This is usually regarded as education of above the standard ten level. (Secondary education is regarded as completed at the end of the five-year period starting with standard six and ending at the completion of the standard ten year.) Tertiary education need not be of university level and, in fact, a fairly large proportion of it is of a part-time nature and does not attain to this level.

(d) Special Education.

This generally refers to the education of deviate [1] *children and reference will be made to one type, the education of the mentally retarded child, which may be vocational in nature.*

1.2.2. The Union of South Africa

Reference has been made to the strong sense of independence which existed at the time of Union and, for that matter, still exists.

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1. *Deviate children, for this purpose, includes the blind, deaf and dumb, epileptics, cerebral palsied, physically handicapped and to children sent to schools, which were at one time called industrial schools but which are schools under the Children's Protection Act, and to youths sent to reform schools. All of these are cared for by the Department of Higher Education. Mentally retarded pupils are the charge of the Provinces.*

Dr. Malherbe wrote "Many of the failures of the provincial system in educational administration and the difficulties that resulted from that system are due to the fact that the powers of these Provincial Councils are distinctly limited. They are constituted parts of a Union and not of a Federation, and they are always subject to the overriding power of Parliament. What happened on the establishment of Union was not that the four Colonies retained certain powers and functions and handed the rest over to the new Union Parliament, but rather, all the powers and functions of the four Colonies which combined to form the Union were united in one legislative Union, and out of these the Provinces were created as new institutions in order to deal with certain matters of local administration and legislation, and with other matters which might be entrusted to them by the Union Government or Parliament. The fact that the new Provinces have the same respective boundaries as the old Colonies must not blind us to the fact that the Provincial Councils are in no sense the heirs of the old Colonial Parliaments, but are new bodies created by the Act of Union for a specific purpose.

The chief limitations of the Provincial Councils are: Firstly, there is always the possibility of a veto by the Governor-General on all their actions; secondly, their powers are strictly limited to the matters specified in Section 85 in the Act of Union; thirdly, they are limited most strictly by what has been called the over-riding power of Parliament". [1]

Against this background it can be seen that the Provinces were very jealous of those rights and privileges which remained to them after the passing of the Act, a fact which assists in understanding certain of the controversies which have arisen during the last fifty-nine years.

It should be remembered also that in the very early days of education in South Africa, communication between the educational

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1. E.G. Malherbe. "Education in South Africa 1652 - 1922." Cape Town. Juta and Co. Ltd. 1925. p.448.

authorities was extremely rare. There was a Bloemfontein Conference in 1903 which set some sort of a pattern but even on this occasion the matters discussed were more in relation to teachers' conditions of service than to curriculum matters, which were still under the influence of the University of the Cape of Good Hope and later under the Joint Matriculation Board.

1.2.3. The South Africa Act, 1909

Part V, Article 85 of the repealed South Africa Act, 1909, is the part which directly concerns education. Part V as a whole has to do with the provinces in all aspects of their working. Article 85 is in thirteen parts and defines the powers of provincial councils. Paragraph (111) of this article states "Subject to the provisions of this Act and the assent of the Governor-General-in-Council as hereinafter provided, the provincial council may make ordinances in relation to matters coming within the following classes of subjects (that is to say) :- .....

(111) Education, other than higher education, for a period of five years and thereafter until Parliament otherwise provides: ..... ."

1.2.4. Definition of "Higher Education"

The problem that had to be confronted at once was the definition of "higher education". Mr. George Hofmeyr, the first Under-Secretary for the newly-created Ministry of Education, writes in his first annual report "The first difficulty which presented itself on the institution of this Department was the interpretation of the term Higher Education, as denoting the sphere of the Department's operations in accordance with the South Africa Act". [1] *The Minister of Education called a conference of the Directors of Education in Cape Town. It took place on the 17th and 18th June, 1910 and, among others, passed the following resolution:*

"That this Conference is of opinion that, for the purposes of the South Africa Act, Higher Education should include education beyond the

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1. *Report of the Under-Secretary for Education for the year ending 31st. December, 1910. U 12-1911. p.1.*

standard of Matriculation, or a standard considered by the Minister to be equivalent thereto which is carried on in an institution established under a special statute, and any extension or continuation courses carried on in connection with such an institution which the Minister may approve, and courses for the training of teachers followed in institutions to be afterwards named." [1]

This might have been thought to have clarified the issue had the decision been accepted as it stood, but the four Directors, in November of the same year, proposed the principle that as long as primary and secondary education remained under the control of the Provincial Administrations, the training and certification of teachers should remain a provincial function. [2] However sympathetic anyone might be to this attitude of the provinces, it is extremely difficult to visualise the training of teachers, at any rate in recent years, as being of secondary standard. Whether or not this influenced the central government department in some deviations from the basic principles of the agreement in later years, it is difficult to say, but it must surely have been remembered as a precedent.

1.2.5. Technical and Industrial Education

In November 1911 the Minister deemed it expedient to call yet another meeting with the Provincial Directors. There had been much correspondence between the Department and the provincial authorities, much of it to do with the training of Second and Third Class teachers, but in this particular instance the question had to do with the respective jurisdictions of the Union and Provincial Administrations in regard to technical and industrial education. The Conference was held in Pretoria on the 8th, 9th and 10th of November, 1911, for the purpose of

"(1) Ascertaining what was being done in the Provinces in the matters of technical, industrial and commercial education;

(2) Considering a common policy in respect of these branches of education;

(3) Discussing ways and means for carrying such policy into effect." [3]

1. Ibid. p.2.
2. "Education in South Africa 1652 - 1922" op cit. p.430.
3. Report of the Under-Secretary for Education 1912. UG 21-1913. p.3

In his report for the two years ending 31st. December, 1912, the Under-Secretary quoted from the Minister's opening address. This is reproduced, despite its length, because it gives a very clear picture of the divided state of education at that time. "What are my reasons for convening this Conference? Shortly after Union was accomplished, representations were made to me from different parts of the Union to take the matter in hand. My reply was that primary and secondary education did not fall within my charge; at the same time I felt that unless the Union Government was going to take the matter in hand to a very large extent it would remain "piecemeal", for whatever the four Provinces were doing in the matter they would not be working in the same direction. An opportunity then occurred to get a little more information from the Union point of view as regards technical education in this country. Professor A.E. Snape, of the South African College, was making a tour through the Union, and I asked him to visit the different technical institutions existing in the Union and to furnish me with a report. ..... It is not a complete survey, but I think it serves a useful purpose by focussing our attention on what has already been accomplished. A close study of technical and industrial education in South Africa at the present moment discloses, as one may expect, almost an infinite amount of variety. The systems are different in different Provinces. The state of public opinion in the different Provinces is also diverse.

I find that industrial and technical education has been divided between the Union Government on the one hand and the Provincial Administrations on the other; and that at present there are nine different departments concerned with its administration. Five Union departments and four Provincial Administrations "have a finger" in it. First of all the Union Education Department deals with the South African School of Mines and Technology at Johannesburg, and indirectly with the evening classes and examinations conducted by that body. Applications for industrial institutions, under the Labour Colonies and Industrial Institutions Act of the Cape Province (Act No. 10 of 1909) also come to the Union Department, though the grant for salaries,

etc., have to be considered by the Provincial Education Department of the Cape. The Railway Department has its schools for the apprentices in the workshops. The Agricultural Department is concerned with all agricultural education. The Prisons Department has established and is establishing industrial schools under the Prisons Act, 1911, while the Mines Department is conducting a miners' school on the Witwatersrand. In addition to these five Union Departments there are the four Provincial Education Departments each carrying out a different system of technical education. As an example of diversity, take the Government grants given to the following institutions: In the Pretoria Trades School and Polytechnic there are 451 day scholars and 200 evening scholars and the Government grant to this institution is £2 300 per annum. The Maritzburg Technical Institute, with 351 scholars, receives £2 000 per year from the Government. In Cape Town, with the amalgamation of the railway and school board classes, there are 528 scholars, and the total amount received from the Government and from the railways for the whole of the Cape Town work is £190 per annum. ..... .

There is another point of diversity, and that is the granting of certificates. At present there are five different bodies or institutions granting certificates for this class of education. To have an improved system of granting certificates will go a very long way indeed towards coordinating the work done in the different Provinces and assimilating the different departments." [1]

At this point it may be as well to examine some aspects of vocational education in the country at this time. Until the last quarter of the nineteenth century the people formed a predominantly pastoral and agricultural community. Land in large portions was no longer available and sub-division, so that each family member had his own "sitplekkie", had led to very small portions, consequent impoverishment and to the "Poor White" problem. Some people from the rural areas drifted into urban areas where, as a result of the native

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1. *Conference on Technical, Industrial and Commercial Education. UG No.2 - 1912. p.6 ff.*

labour available, there were few openings for unskilled white labour.

The discovery of diamonds and gold changed the situation. Large urban areas developed and consequently a demand for agricultural products. This in its turn called for more scientific and businesslike farming. Railway construction accelerated. There was a shortage of skilled artisans which led to the importation of the necessary labour force.

The brief period of unexpected wealth was unfortunately followed by a severe depression reaching a climax in the period 1906-1908. There was much unemployment and a very keen competition for every kind of work.

Industrial and technical education follows social and economic development. Thus it was that the need for technical education arose from the needs of the growing industries. Industrial education stemmed from the urgent need to help the poor whites. [1] Malherbe puts it that the industrial schools "were born out of poverty, misery, depressions, wars and epidemics. They were not sponsored by the industries but by charitable institutions such as the Dutch Reformed Church. The instructors were on the whole more well-intentioned and religious people than competent technicians." [2] Mrs McKerron mentions, for example, that the agricultural school at Stellenbosch was managed by a divinity student. [3]

It can thus safely be said that up to the end of the nineteenth century the South African experience of industrial work was extremely limited. There were two boom periods, the first following the Anglo-Boer War and the other following the 1914-1918 war, but at the time of Union little had been done. There were very few technical schools of any kind and these were not yet particularly efficient - in fact, the South African School of Mines and Technology in Johannesburg was really the only institution well equipped and organised for this kind of work. These facts will emerge as the various types of full-time vocational schools are discussed.

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1. M.E. McKerron. "A History of Education in South Africa 1652-1932." Pretoria. J.L. van Schaik. 1934. pp. 103 & 104.
2. E.G. Malherbe. "Education and the Poor White." Report of the Carnegie Commission of Investigation of the Poor White Question in South Africa. Stellenbosch. Pro Ecclesia Drukkery. 1932. p.55.
3. "A History of Education in South Africa 1652-1932." op cit. p.107.

Despite the very obvious diversity, the proposal that vocational schools (industrial and trades schools) should be directly under the control of the Union Department, did not carry the blessing of the Directors of Education. Three abstained from voting and one voted against the proposal. In point of fact, when the Administrators were asked to comment on the findings of the conference it was very apparent, according to Mr. George Hofmeyr, that the Provincial Authorities would be disposed to take exception to any infringement of their rights under the South Africa Act.

1.2.6. The National Advisory Board for Technical Education

The outcome of this conference and of a subsequent conference between the Minister, the Administrators and the Provincial Executive Committees in Cape Town on 4th & 5th March, 1912 was that a National Advisory Board was set up for the purpose of advising the Minister or any other Minister of the Union or any of the Administrators of the Provinces on matters relating to technical, industrial and commercial education, and to instruction in domestic science or home industries. It was, however, very clearly laid down,

"(1) that the Board shall not be concerned with any matters relating to the work carried on as part of the curriculum of any primary or secondary school as distinguished from special institutions for the special branches of education above referred to:

(2) that the functions of the Board shall be purely consultative and advisory." [1]

The restrictions imposed by this Conference still furtner illustrate the air of suspicion with which the work of the Union Department of Education (later the Department of Education, Arts and Science and still later the Department of Higher Education) has always been regarded by the Provincial authorities, and vice versa. This has hampered, and is still hampering, the development of vocational education in South Africa as will become obvious as this theme develops.

Regulations providing for the establishment and running of an Advisory Board for Technical Education were published in September 1912.

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1. *Report of the Under-Secretary for Education for the two years ending 31st. December 1912. UG 21-1913. op cit. p.4.*

There were ten members of whom the Under-Secretary for Education acted as chairman. The four Directors of Education were ex officio members and were assisted by A.B. Reid, representing the South African Manufacturers' Association, E.J. Cattell, representing the Associated Chambers of Commerce, J.C. Lawn, A.R.S.M., A.M.I.C.E., M.I.M.E. representing the Mining Industry, D.A. Hendrie, representing the South African Railways, and the Rev. D.J. Pienaar, B.A., representing the industrial schools and the interests of the Poor Whites. [1]

The Board, which was presided over by the Minister, held its first meeting in Pretoria on 14th November, 1912. It divided into three committees to collect information and met again in Cape Town on 21st. February, 1913. It continued to meet until the beginning of 1918. It will, therefore, not be possible to discuss in detail all of its valuable work although reference will be made to certain aspects of it. There were, however, four of the fifteen resolutions passed at its second meeting in Cape Town which are of importance at this point because they throw further light on vocational education at this time:-

(4) "The Board is in agreement with the resolution passed at the Conference on Technical Education held in Pretoria in November, 1911, to the effect that it is desirable to extend existing industrial institutions in the Union and to increase their number."

(5) "The Board also agrees that provisions should be made in the Union for industrial farm schools where selected sons of indigent parents can be trained with a view to employment on farms or to their being placed on the land."

(11) "The Board desires to express its great gratification at the response on the part of employers and others interested to the circulars of enquiry as to the demand for skilled artisans and apprentices. The replies were not only of great value, but were evidence of the interest taken in the matter throughout the country."

(20) "In order to make the work of the Board effective and to establish and maintain uniformity and co-ordination of technical work throughout the Union, as far as this is practical and desirable, the

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1. Ibid. p.5.

Board strongly recommends the appointment of a "Technical Advisor". " [1]

These resolutions indicate the awakening of some sections of the public to an industrial future for South Africa and the implications of secondary industry that accompany the primary. The last resolution indicated the need for a co-ordinator, at this time non-existent.

It must be said again in general that the Board did an enormous amount of most valuable work. It is a pity that a board so representative of opinion could not be entrusted with some executive powers. This is a pattern, however, which seems to have been followed down to present times and, to say the least of it, results in much unnecessary delay and time wasting.

An interesting point emerging from the meeting of the Minister, the Administrators and their executive committees in March 1912 was the reference not only to technical but to commercial education and domestic science education. No serious attention had hitherto been given to these branches.

1.2.7. Further definitions of Higher Education

Attempts to define "Higher Education" continued. The University Commission of 1914, usually referred to as the Laurence Commission after the chairman P.M. Laurence, suggested that higher education was substantially equivalent to instructing "persons above secondary school age". [2] In view of the increasing attention being given to the continued or further education of part-time students, this definition did not help much.

At first sight it appears strange that the next definition appears in the Financial Adjustments Act, No.5 of 1922. In section 11 we find that higher education is

"(a) Education provided by Universities and University Colleges incorporated by law;

(b) Education provided by the South African Native College;

(c) Education provided by such technical institutions (including

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1. Ibid. p.6.
2. University Commission Report, 1914. UG 42-1914.

schools of art, music, commerce, technology, agriculture, mining and domestic science), as the Minister may declare to be places of higher education.

(d) Such part of education provided by other technical institutions as the minister may, after consultation with the provincial administration concerned, declare to be higher education."

This definition was subsequently somewhat but not radically changed in several financial relations and/or adjustments acts. The clue is found in the following paragraph. "Shortly after 1910 it was found that certain types of education were of such an expensive nature that the provinces were unable to conduct them satisfactorily. The Central Government from time to time intervened and took over certain educational functions which, it considered, should in the general interest of the country and the welfare of its people fall under national control. Thus industrial education, child welfare, agricultural education (since handed back to the provinces with the exception of agricultural colleges and extension services which are still under the State Department of Agricultural Technical Services), vocational and technical education, special education and Bantu education, were by successive acts of legislation declared by the Minister of Education, Arts and Science to fall under 'Higher Education' and so under the Central Government. The effect was that where originally the term 'Higher Education' applied solely to institutions of university rank, it now covers certain types of education from kindergarten to the highest post-graduate classes of the university.

This anomalous situation has its counterpart also in the Provincial domain where, besides administering primary and secondary education, the provincial departments also train teachers whose two-year and three-year courses are all of a post-matriculation nature and therefore strictly 'Higher Education'." [1] *From the last sentence we note that a publication emanating from the Department of Education, Arts and Science expects*

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1. *National Bureau of Educational and Social Research (now the Human Sciences Research Council), Information Series No. 3, "Education in South Africa", 1961. p.1.*

education beyond matriculation level to be "Higher Education". But the point of immediate interest is that of the financial implications of some types of education. Just as the uncertainty of the meaning of the term "Higher Education" led to a whole string of conferences, commissions and committees, so the subsidy system led to a number of commissions being appointed to enquire into the financial status of the provinces. Some of these had perforce to deal with education.

1.2.8. Financial Implications

Section 118 of the South Africa Act provided that "as soon as may be after the establishment of the Union" the Governor-General-in-Council should appoint a Commission to institute an enquiry into the financial relations which should exist between the Union and the Provinces. The Commission, known as the "Murray Commission" was appointed by Government Notice No. 212 of 1911 and published in the Gazette of 7th February 1911.

The reason for this provision in the Act of Union was that at least the Cape Province and the Orange Free State would not be able to finance their services at pre-Union standards from direct taxation levied within their borders. The task of the Murray Commission was to devise a system of subsidies to the Provinces from the Union Government. It recommended a 50% of expenditure basis of subsidy which put the provinces with the largest taxable capacity in a position to develop their services to a higher level than the poorer provinces were able to. For this reason it can be argued that it failed in its task. Act No. 10 of 1913 which came into operation on 1st. April 1913, gave effect to the recommendation. In addition to laying down a basis for the payment of subsidies, the Act defined normal or recurrent expenditure and capital or non-recurrent expenditure. It deprived the provinces of their right to borrow money for capital expenditure in their own recognizances, transferred to the provinces certain sources of revenue which, since Union, had accrued to the Consolidated Revenue Fund but which are direct taxes within the meaning of the relative section of the Act of Union. If the normal or recurrent expenditure for any financial year should exceed that

of the previous year by more than 7½%, the subsidy in respect of the excess was fixed at one-third in lieu of one-half. This Financial Relations Act remained generally in force until 31st March 1945, when it was repealed by a consolidating act No. 38 of that year. By that time, however, it had been very substantially amended by fourteen acts passed between 1917 and 1940. [1]

Dr. Malherbe suggests that it was largely due to the fact that the Provinces participated so freely in Union funds that education developed to the extent that it did. [2]

Following upon the Murray Commission, several other Commissions enquired into the finanacial, and other, relationships between the Union Government and the Provinces.

The first of these was the Provincial Administration Commission of 1915, usually called the Jagger Commission. Its terms of reference were "to inquire into the working of the system under which Provincial Administration is carried on", "whether the system of Provincial Administration is conducive to the efficiency, economy and the best interest of the Union" and, inter alia "whether education (other than higher education) shall as a whole or in part cease to be a matter for Provincial Administration and become one for direct control by the Government of the Union".

Since the primary concern here is with education, let it be said that the Commission recommended that the Provincial Council system be abolished and a system of local government built up. It recommended the establishment of "District Councils" with certain administrative powers and functions but no legislative powers other than the power to make by-laws. Seven such councils were to be created in the Cape Province - Western, North Western, South Western, Northern, Midland, South Midland and Eastern. All this was to occur after ten years from the date of Union. One of the powers of these councils was to be the control of "Education, Primary, Secondary and Technical".

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1. Notes on the Estimates. Unpublished document of Finance Section, Cape Provincial Administration.
2. "Education in South Africa 1652 - 1922." op cit. p.409.

In view of what has happened recently in the transfer of all secondary education to provincial control and in the passing of a National Education Policy Act, No. 39 of 1967, it will not be out of place to record some opinions current at the time of the Jagger Commission as reflected in some memoranda submitted to it.

Dr. W.J. Viljoen, at that time Director of Education in the Orange Free State, proposed that education should become a national function under a Superintendent-General of Education. He recommended the abolition of the Provincial Departments and that the Union be divided into six areas - West and East Cape, the Witwatersrand, the remainder of the Transvaal, the Orange Free State including Griqualand West, and Natal. Each district should have a Director. These, together with the heads of the Department of Native Education, of Technical Education, and of Medical Inspection and Health should constitute the Board of Education for the Union.

Dr. J.E. Adamson, Director of Education of the Transvaal, proposed that there should be thirteen districts - five in the Cape, four in the Transvaal, two in Natal and two in the Free State. The Union should deal with the broad questions of principle and policy, while the local bodies, which should be purely administrative, should deal with details.

Dr. C.T. Loram, Chief Inspector, Native Education, Natal, proposed that the Union should be divided into eight or ten districts each under a "District" School Board. The functions of these boards would be prescribed by the Central Legislature. He was adamant that "Education in South Africa should be regarded as a national matter because :-

(a) Only thereby can the fundamental principle of education in a democracy by equality of financial burden and educational opportunity be assured;

(b) the presence of a preponderating black and coloured population demands a uniformity of policy and equality of treatment unattainable by other means; and

(c) the sovereign power of taxation is vested in the National Government, and it is the duty of the power which levies taxes to see that the taxes are wisely used to advance the common good."

Dr. Loram proposed that, in addition to the amount given to education from the general revenue, there should be a "district" school tax, the minimum to be laid down by law, and amounts collected in excess of this minimum to be subsidised on a £ for £ basis.

Mr. G.T. Plowman, Administrator of Natal and a member of the Commission, submitted a minority report. In it he mentioned that since the date of Union primary, secondary and technical education had made great strides in the provinces and that the systems had been built up with due regard to local wants and conditions. He complained that in Parliament education was apt to be treated as of secondary concern, that it was in danger of becoming a subject of party politics, and that it would be impossible for Parliament to frame an educational policy that would meet the views and requirements of the several provinces. He thought that the transfer of education to the Union Government would result in increased expenditure. "It cannot be said" he wrote "that a case has been made out for the abolition of the Provincial Councils, neither can it be maintained that the system has proved an expensive form of government, taking into consideration the benefits conferred locally and the developments which have taken place." He recommended that the Provincial Councils be retained or at least given a further trial under normal conditions. [1]

What might have happened had there not been a World War waging, is a matter for speculation, but by the time that the ten year period of protection of the Provincial Councils lapsed on 31st May, 1920, the Government was so involved in political problems and problems resulting from post-war depression that it was in no state to face the difficulties that would have followed had the Jagger Commission's recommendations been accepted. No action was taken until 1922 when another commission was appointed to re-examine the whole Provincial question.

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1. Report of Provincial Administration Commission. UG 45-1916.

This commission, the Provincial Finances Commission, was under the chairmanship of William Duncan Baxter and so is often called the Baxter Commission. In short, the purpose of the Commission was to examine provincial expenditure with a view to economies, to examine the sources of provincial revenue and, thirdly, to examine the system of financing capital expenditure of the Provinces. One of the main findings was that to supplement the revenue from provincial sources (licences, transfer duties, motor taxes, Entertainment Tax, racing taxes, Immovable Property Tax, education fees and hospital fees) the Union Government should pay a subsidy which should take the form of a grant-in-aid of education and that this amount should be determined by the number of European pupils in average attendance in Government schools on the following basis:-

Cape Province	*£14 per head.*
Natal	*£14 per head.*
Transvaal	*£16.7.6. per head.*
Orange Free State	*£15.8.0. per head.*

Another recommendation was that local authorities should be established with definite financial responsibilities in respect of education, hospitals and roads.[1]

Shortly after the Baxter Commission reported, the Union Government appointed yet another commission - The Education Administration Commission - on 1st. August 1923. The chairman was Dr. James Gunson Lawn[2] *and the other members were Principal Jan Hendrik Hofmeyr of Johannesburg, Professor Fred Clarke of Cape Town and Clifford Meyer van Coller, M.P. for Cathcart. The terms of reference were :-*

(1) To examine and report upon the following matters in connection with education as now administered by the Provinces in respect of European children:

(a) the limits within which education should be compulsory -

(i) in respect of the age of the pupils;

(ii) in respect of the attainment of the pupils;

(b) the extent to which the Union Government should assume liability for the cost of education within such limits;

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1. *Report of Provincial Finances Commission. UG 19-1923.*
2. *At one time Professor at the School of Mines, Kimberley and Johannesburg.*

(c) the extent to which the Union Government should provide funds for the cost of education outside these limits, and the manner in which such provision should be made;

(2) To examine and report upon the existing provisions made whether by the Union Government or the Provinces in respect of European children or pupils for

(a) the education and care of defective and indigent children, and of children committed under the Children's Protection Acts to the care of institutions or individuals:

(b) industrial or technical education or training, and to advise whether and if so in what respect the existing provisions should be altered.

The committee, as constituted above, reported on 25th October 1923, on the first of the terms of reference only. So far as the financial side of the investigation went they found themselves in agreement with the Baxter Commission. In relation to the limits during which education should be compulsory, the Commission had many pertinent remarks to make with many of which educationists today would still be in accord, but only those which have any relation to the present theme will be mentioned. The recommendation with regard to compulsory school attendance was during the period "extending from the completion of the seventh year to the completion of the fifteenth year". [1] *There were a number of permissive clauses one of which was that attendance at a primary school after the completion of the fifteenth year and until the completion of the sixteenth year was voluntary for pupils who had not yet completed the ordinary primary course.*

The idea behind the Commission's recommendations was the retention at some form of secondary school of bright pupils who were leaving immediately upon passing standard six and at the same time providing some more suitable form of education for pupils of about 16 years of age who showed little prospect of benefiting from the normal academic course. It will be shown later that there are

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1. Education Administration Commission. First Report. UG '41-1923. p.9.

strong differences of opinion as to the type of education which should be provided, but the significant point here is that it was becoming recognised that to keep backward pupils of the age of fifteen or sixteen years in the same class as brighter pupils of the age of about thirteen was incorrect procedure.

The other point of significance in the first report of the Commission was this:- "The Commission considers it desirable in the interests both of economy and of stable educational finance that the liability for the whole reasonable cost of compulsory education should be assumed by the Union Government". [1]

A slightly different commission presented the second report. Professor Lawn resigned, Principal Hofmeyr became chairman and Mr. Frederick Claud Sturrock of Johannesburg was appointed as a member. Much of the work of this Commission will be discussed in other chapters but this much is very relevant at this stage. "Generally speaking it is true to say that such provision as is made by the Provinces has arisen out of one or other of two necessities:-

(1) The necessity for making the law of compulsory attendance a reality, by the removal of indigency as a cause for non-attendance at school.

(2) The necessity for making provision for certain types of education to meet the special needs of certain children who through indigency, deliquency, or some other cause cannot be suitably dealt with in the ordinary schools.

It is from these two necessities that the whole diverse apparatus of boarding grants and bursaries, indigent boarding houses, primary school hostels and industrial schools has arisen." [2]

This report was considered at a conference in Durban at the end of October 1924 between the Minister of Finance, the Minister of Internal Affairs, Welfare and Education and the Provincial Administrations. At this point only the financial aspects of the work of the conference

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1. Ibid. p.13.
2. Education Administration Commission. Second Report. UG 19-1924. p.28.

will be considered. These led to the Provincial Subsidies and Taxation Powers Amendment Act, No. 46 of 1925, which enacted that the subsidy for all provinces should be:-

(a) £16.7.6 per pupil in respect of the first 30 000 pupils and £14 per pupil in excess of 30 000.

(b) £2 per 100 hours of pupil attendance at part-time classes.

(c) £60 per student training as a teacher whose course is of post-matriculation character and £14 if not of post-matriculation character.

(d) £5 per pupil in an aided primary or secondary school.

(e) £5.5.0 per non-European pupil, other than a native.

The recommendation regarding the establishment of local authorities, where they did not already exist, with financial responsibilities in respect of education, hospitals and roads, was not given effect to.[1]

The subsidy favoured all the Provinces except the Cape Province which at that time was the only one with a substantial number of pupils in excess of 30 000.

Another Provincial Finance Commission (the Roos Commission) sat in 1933 and produced its report UG 46 in 1934. Although it dealt with education and said that a subsidy based upon educational statistics was unsatisfactory, as it led to a confusion of ideas "to whit that a subsidy is paid to defray the cost of education only, forgetting that, while based on education, it is really the Union's main subsidy towards the cost of the whole of the Provincial services", the commission did not produce an acceptable alternative.

The reports of such commissions and in particular that which led to the Financial Adjustments Act No. 5 of 1922 led Professor F. Clarke to write in the Cape Times of November 26th 1924, "Matters of educational principle are subordinated to financial convenience .... . In the absence of any other coordinating authority the Treasury is bound to step into the breach with results that must be harmful to education and to finance in the long run. We shall never solve

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1. Provincial Subsidies and Taxation Powers Amendment Act, No.46 of 1925.

educational problems till we learn to tackle them from the educational end." [1] *This, of course, has proved true. Because of the subsidy system based on 50% of the normal or recurrent expenditure and allowed to increase by a certain percentage annually before the subsidy reduces to less than 50%, the Provinces have not really been burdened with the responsibility of finding the greater part of the funds for education. The cost of providing education has been steadily increasing over the years since Union and, ipso facto, the cost of providing vocational education is very great compared with most other forms of education. As Adriaan Smuts wrote "The Provinces lack the funds to provide adequately for vocational subjects"* [2] *and Professor M.C. Botha, Secretary for Education, wrote "The benefits for vocational education which followed this step are widely lauded; not, indeed because the provincial education departments were technically unable to shoulder the responsibilty for technical education, but because the Union Government had more funds at its disposal."* [3] *Hence it was that when the Minister of Education at the 1924 Durban Conference declared his willingness to assume responsibilty for all vocational education at that date aided or controlled by the Provinces, the provincial authorities accepted the offer. The necessary legislation was passed in the 1925 session of Parliament and an extra amount of £190 000 was voted for the transferred vocational education.*[4]

Immediately after the Durban Conference the Union Department of Education submitted to the Provincial Administrations lists of schools and services suggested for transfer, and as from 1st. April 1925, a number of trade and industrial schools which were then under the wing of the Cape Province were transferred. The trade schools were at Knysna, Karreedouw, Marlow, Willowmore, Lady Grey, Montagu and two at Ugie. The ten aided industrial schools were:- two at Adelaide,

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1. Quoted by E.G. Malherbe, Education in South Africa. op cit. p.432.
2. Adriaan J. Smuts "The Education of Adolescents in South Africa" Juta & Co. Ltd., Cape Town. 1937. p.86.
3. Annual Report of the Union Department of Education. 1935. p.5.
4. Report of the Secretary for Education for the year ending 31st. December 1925. p.75.

the Salesian Institute in Cape Town, one each at Oudtshoorn, Riebeek West, Robertson, Tulbagh, Uitenhage, Wellington and Worcester.[1]

It should be noted that under the provisions of the Financial Relations Act of 1922, two technical colleges were taken over. The Durban Technical College in April and the Cape Town Technical College in October. Each of these was to start full-time vocational schools at the secondary level, as were other technical colleges which developed later.

1.3. General

Here, then, was the divided education of which Dr. Smit wrote. It resulted in the first place from an inadequate definition of "higher education" and in the second place from the financial stringency from which the Provinces suffered and which prevented them keeping pace with the growing demand for vocational education. From 1925 the provincial education authorities were responsible for general, secondary, full-time education and the Union Education Department was responsible for full-time and part-time vocational education. The unfortunate outcome of this dual control was to open up chasms between general, academic education and vocational education. Dr. M.C. Botha wrote "The lack of proper co-ordination ..... is to be found in a still greater degree in education. But here co-ordination is more difficult to achieve; for ..... we are confronted with separate and distinct governmental authorities: that of the provinces and that of the Union.

Various governments have at various times by means of commissions and otherwise attempted to solve the problem of the relations between the Union and the provinces. It would be no exaggeration to state, however, that all these investigations have been aimed at a satisfactory agreement in respect of financial relations. Even the taking over of vocational education by the Union Government was based on financial and not on educational considerations. The result has been that the administration of the education of the adolescent has become more

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1. Ibid. p.76.

complicated and, from the point of view of school organisation, much less efficient than it might have been. The Union has no national policy in education and under the existing system never can have." [1]

In his previous report Prof. Botha had written that the need for co-operation and co-ordination in the realm of education had often been felt and discussed. There had been inter-departmental conferences but no lasting benefits had accrued because of far-reaching differences of opinion or because only pious resolutions had been passed. [2] *This was very unfortunate because, of course, the pupils were the ultimate sufferers.*

In the first place there were no uniform standards either in curricula, syllabuses or examinations unless pupils were prepared for matriculation. Hence interchange from school to school was virtually impossible. In the second place was the fact that children in the same age group were divided into categories according to the career which they purposed to follow. This placed them under different education authorities, in different buildings and tended to make them strangers. But the third aspect of this dualism was the worst. Two factors explain how this came to be. Some of the vocational schools, as will be later shown, were established to deal with the problem of indigency; a stigma thus tended to attach to these schools to which the uneducated, poorly-nourished offspring of poor whites were sent. Principals of other schools were well aware of this and, in many cases through ignorance of progress made in the vocational schools, and in other cases, deliberately, labelled these schools as inferior and advised parents not to send their children to them. Particularly was this so in the case of average and above-average pupils. Where principals had difficulty in filling their schools they advised against a transfer in any case. Hence it was that many children who would have benefited by a vocational education were kept from it and, in all too many cases, left school at the earliest opportunity for lack of interest in or ability to cope with, the subjects of the

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1. *Annual Report of the Union Department of Education. 1935. op cit. p.6.*
2. *Report of the Union Department of Education. 1933-4. p.7.*

ordinary high school curriculum. Adriaan Smuts was completely correct when he wrote that the division in education resulted in "a dissipation of energy, overlapping on the one side and gaps on the other, and amidst it all rich possibilities going to waste." [1]

Reference has already been made to the Provincial Finances Commission (Roos Commission) of 1933. The problems of dualism in education must have been worrying many people at the time of this Commission because these problems were discussed by it. Dr. S.F.N. Gie, Secretary for Education at that time, mentions the fact that there was a possibility of a re-transfer of vocational education to the provinces.[2] In point of fact, according to Prof. M.C. Botha "Great consternation was caused in the ranks of the teachers and instructors during the past year as a consequence of the offer to hand back these schools to the provinces." [3] The offer was refused solely because of financial considerations, [4] and so the divided control continued.

Reflecting upon what has happened in the field of vocational education in the period from 1925 to 1968, it is not possible to come to any other conclusion than that the division of functions resulted in much good despite the obvious disadvantages already referred to. Dr. Gie wrote "I am convinced that the transfer of vocational education to the provinces would be detrimental to it ..... . When they were under provincial control, two facts militated against their proper development. They were submerged under the much wider educational activities of the provinces, and the stigma of pauperism was attached to them. The Union Education Department was the first educational authority in South Africa which gave the problem of vocational education in South Africa such well-informed, careful and sympathetic attention ..... . Under the provinces the vocational schools were regarded as poor schools and the instruction was often made subservient to the production of marketable goods. Many of them were in fact state

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1. "The Education of Adolescents in South Africa." op cit. p.83.
2. Annual Report of the Union Department of Education. 1932. p.5.
3. Annual Report of the Union Department of Education. 1933-4. op cit. p.8.
4. Ibid. p.7.

factories, the underlying idea being that the pauper children should render service to the State for the money spent on them and if possible by production cover the costs involved." [1] *He went on to point out that the instruction was not graded and that the cultural background was neglected. The Union Education Department drew up properly graded courses of workshop practice and of trade theory to go with the practice. A study of languages and of cultural subjects was gradually introduced. Libraries were provided. Inspectors of general and vocational subjects were appointed who saw to it that the quality of the work and methods of teaching were acceptable. Fee-paying pupils were admitted to the schools and selection procedures were applied to all applicants for places. Hence the status of the schools was gradually raised.*

It would be very wrong not to acknowledge the pioneering work that was done by the Provinces and by the Churches, particularly the Dutch Reformed Church. It will be shown later how large a part was played by these in establishing vocational schools. Nevertheless, without the assumption of responsibilty by the Union Government in 1925, it is difficult to visualize vocational education reaching its present standard.

To return to the work of the Roos Commission. One of its main recommendations, and one which was accepted, was the setting up of a Provincial Consultative Committee with the Minister of the Interior, Public Health and Education as chairman, the four administrators and four members of the Executive Committees as members. The establishing of this committee halted for many years the creation of a national council for education, an ideal which was cherished by most educationists over the years. The autonomy of the provincial governments proved to be an insuperable obstacle. However, it was hoped that the consultative committee might prove an effective substitute for the education council especially as the heads of the five education departments were appointed as a sub-committee of the consultative committee to advise on educational matters. Professor Botha reported that in 1934 this

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1. Annual Report of the Union Department of Education. 1932. op cit. p.5.

sub-committee had given attention to

(i) The co-ordination between departments of education and the universities in the training of teachers.

(ii) Vocational guidance and after-care.

(iii) Wireless as a means of education.

(iv) The control of agricultural education.

(v) The desirability of greater uniformity in the conditions of service of teachers under the various departments.

(vi) The education of deviate children.

(vii) The medical inspection and treatment of school children.

(viii) General health instruction, including information in connection with diseases such as bubonic plague and bilharzia.[1]

The hope that the Provincial Consultative Committee might prove to be an effective substitute for a council of education were not realised. For example, the committee met during 1935 and one of the most important items on the agenda was the question of uniform scales of salaries and conditions of service for all teachers in the five education departments. At the suggestion of one of the provinces the sub-committee of education heads had met and had worked out scales which might prove acceptable to all the provinces and the Union Department of Education. When the Consultative Committee met it was found not only impossible to agree on uniform salaries but that the most reasonable suggestions in regard to uniform conditions of service were thrown aside. Now it must be remembered that so different were conditions of service in the five education departments that transfer from one department to another was, to say the least of it, extremely difficult; most teachers thought it impossible. It looked at that time as though this condition was "to be perpetuated in the name of provincial autonomy".[2]

Apparently the position was that there had to be unanimity in the committee and then the unanimous resolutions went as suggestions to the provincial executive committees. Thus the Consultative

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1. *Annual Report of the Union Department of Education. 1933-34. op cit.p.7.*
2. *Annual Report of the Union Department of Education. 1935. op cit. p.7.*

Committee had no executive powers and the efforts of a progressive province could be thwarted by another province. This happened in 1935 when, after lengthy discussion between the various education departments, the transfer of agricultural vocational education to the Provinces was recommended. The Minister agreed and said he would subsidize this form of education on a basis of 80% of the actual costs. One Province demanded 100% and the whole scheme was wrecked. [1] It seemed that the usefulness of the committee would be limited to the passing of pious resolutions.

This is not to be attributed to deliberate unwillingness to co-operate. Rather was it the case that any educational scheme involved expenditure on the part of the Provinces and they were not generously enough supplied with financial means, nor were these means realistically distributed between the Provinces. Hence the Provinces were not equally able to provide educational facilities for the children nor able to pay similar salaries to their teachers. It looked rather as though the Union was a federation, so rigid were provincial barriers imposed by the completely unrealistic subsidy formula.

This Provincial Consultative Committee continued in existence until 1956 when it was dissolved after a life of nearly twenty two years. It must not be supposed that it accomplished nothing of value. As already indicated, it appointed a sub-committee comprising the heads of the education departments. This committee, which survived the Consultative Committee and is now a statutory committee, made many recommendations to the Consultative Committee which were acted upon. Many of these do not concern vocational education and so will not be mentioned here. Among those that have a bearing may be mentioned the creation of machinery for the co-ordination of teacher-training activities, the re-transfer of the agricultural vocational schools to the Provinces, vocational guidance and after-care of children through juvenile boards, educational facilities for deviate children and the vexed question of differentiation in education. One of the problems with which the committees had continually to struggle was

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1. Ibid. p.11.

that of the demarcation of functions between the Provincial Education Departments and the Union Education Department. This is important because of the events which followed the attempts to solve the problem. The problem involves, too, the question of differentiation in secondary education, the second point made by the Superintendent-General of Education in his annual report for 1967.

1.4. Differentiation in Secondary Education

1.4.1. Introduction

Dr. M.C. Botha referred to differentiation in education in these terms: "..... the right child receiving the right education from the right teachers in the right type of school", [1] and he went on to write that neither amongst the public at large nor amongst educationists is general agreement upon this point to be found. "The absolute divorce of what is commonly called vocational education from general education" he wrote "is indefensible, and the sooner we realise this and take steps to obviate the wastage of human material which is the result of it, the better it will be for our children who are the victims. The real interest of the pupils in our schools are ultimately of more importance than provincial and departmental powers or sovereignty." [2] He then went on to laud the attempts of the Provincial Education Departments to find a solution for the serious problem of differentiated secondary education for adolescents.

That the provinces were paying attention to the problem becomes evident from the report of the Conference on Rural Education which met on 1st and 2nd February, 1934, in Cape Town. The report states that the necessity for differentiation in the school curricula for adolescents can no longer be regarded as a contentious matter. It was supposed that differentiation should begin at age 13+ i.e. after a pupil had had six years at primary school, and that the school system should be reorganized so that all children would have at least two years of post-primary differentiated education before leaving school.[3]

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1. Annual Report of the Union Department of Education. 1938. p.10
2. Ibid. p.11.
3. Report of Conference on Rural Education, 1934. UG No.29,1934. p.5.

1.4.2. Overlapping of functions

Then comes a suggestion which leads to the besetting problem of overlapping of educational services. "It has been suggested that the existing arrangement under which Provincial schools are not allowed to devote more than three-eighths of the ordinary school time to vocational and allied subjects does not allow the Departments sufficient scope for differentiation. The introduction of vocational subjects in Provincial schools has probably been retarded to a much larger extent by other factors, e.g. the very general and insistent demand on the part of the public even in small rural centres that facilities for secondary education, wherever they are provided, should primarily be of the academic type leading to matriculation; but the need for differentiation, though it is clearly not yet sufficiently realised, is so serious that no retarding factor, if its removal is at all practicable, should be allowed to remain, and it is recommended that a different principle of demarcation as between vocational education and other education should be introduced to supersede the three-eighths barrier. This principle should be expressed in terms of educational aims." [1] The Conference went on to suggest that the task of the vocational schools was to prepare pupils for specific vocations whereas that of the Provincial schools was, however differentiated the course, of a general nature. The members admitted how fine this distinction was but thought that it could be drawn by close co-operation between departments. [2]

This extract shows that there were vocational subjects being taught in Provincial schools and that it had been found necessary to limit the amount of time devoted to such subjects or a complete overlapping of functions might easily have occurred. The branch of education in which this was most likely to happen was in the commercial field. Mr. H.S. van der Walt, who was Secretary for Education from 12th August 1949 until 12th March 1957, gives some information in this regard. "An effective arrangement with the provinces in regard to the recruiting of students for full-time commercial courses is a

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1. Ibid. p.7.
2. Ibid. p.7.

problem of many years standing. In fact this problem dates from 1911 when the newly established National Council for Technical Education passed a resolution that 'the Government should, wherever possible, establish classes for commercial education'.

In view of the development of commerce in South Africa it is impossible, as well as undesirable, to exclude commercial subjects from general education. There is indeed not a single vocation for which a certain measure of commercial knowledge is, if not indispensable, at least desirable. However, the difference between commercial education, as a part of sound general education, and commercial education, as training for a specific vocation, is not easily defined. It is a matter of scope, nature and approach, with subjects which necessarily overlap." [1] He went on to mention that a number of inter-departmental committees had failed to formulate any clear distinction. More details about the problem will be given in the chapter on commercial high schools. It should, however, be noted that the problem exists to this day and has recently been discussed in the Departmental Examinations Committee of the Cape Education Department and has been the subject of recent unavailing approaches to the Minister of Education.

An example of the kind of agreement that was reached is given: "(a) Admission of pupils from provincial schools to schools of the Department of Education, Arts and Science for full-time technical and housecraft training:

(i) as a general rule pupils of age 14+ will be admitted provided the parents make application in the prescribed way;

(ii) if pupils wish to follow a five-year, or with the approval of the Department of Education, Arts and Science a four-year technical course, the education departments for practical reasons have agreed that they may be admitted after completing the primary school course at a provincial school.

(b) Admission of pupils from provincial schools to schools of the Department of Education, Arts and Science or technical colleges for

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1. Annual Report of the Department of Education, Arts and Science. 1952. p.12.

full-time commercial training:

(i) as a general rule pupils are admitted after standard VIII;

(ii) pupils may, however, be admitted after passing standard VII if they are 15 years old on admission and the parents make application in the prescribed way." [1]

This agreement was tentative for two years as far as commercial education was concerned because revision was expected after the position had again been investigated. In point of fact all that resulted from an apparently clear instruction was confusion and much bad feeling between principals of provincial and departmental[2] *high schools.*

Even after the passing of the Vocational Education Act of 1955 when another attempt was made to reach an acceptable solution, the provincial education heads and the Secretary for Education, Arts and Science could reach no agreement. The difficulty was, and still is, that vocational education and vocationally-directed education are not clearly defined. There are so many factors which have to be considered - the time to be devoted to vocational subjects, the nature of the syllabuses, the approach to the subjects and the equipment used - that any clear definition will be extremely difficult to formulate and in any case the interpretation will depend on the growing and continuing good-will of the people who have to be guided by such definition and the very clear realisation by them that the future of a child is at stake in every decision that they make in guiding pupils into correct courses and schools.

1.4.3. <u>The Vocational Education Act, 1955</u>.

The Vocational Education Act, No. 70 of 1955, has been mentioned. This act was piloted through Parliament by the Minister of Education, Arts and Science for a number of reasons. South Africa was in the throes of its own industrial revolution and the necessary co-operation between the various State departments, commercial and industrial organisations - an essential condition for optimum national efficiency -

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1. *Circular Minute of Department of Education, Arts and Science dated 29/8/1953. p.1.*
2. *'Departmental' means a school under the control of the Union Education Department.*

was lacking. Uniform policy in regard to, and specific planning for, vocational education had now become indispensable. The State was bearing practically the full running expenses of vocational education. Provision for demarcation between vocational and vocationally-directed education, as shown above, was ineffective. There were other reasons not directly related to this theme e.g. a growing demand by Afrikaans-speaking parents and responsible Afrikaans bodies for the establishment of better facilities for Afrikaans-medium vocational instruction. There had been, too, a proposal for free full-time vocational education up to the senior certificate level at the technical colleges. This, coupled with the growing shortage of accommodation at the colleges, suggested that the high schools housed in the colleges should become separate schools under the direct control of the Department.

The act, in Article 1, defines three forms of vocational education:-

(vi) Commercial vocational education - a course of education and training in which more than one-third of the subjects are prescribed commercial subjects and in respect of which more than eight hours (per week) are devoted to prescribed commercial subjects;

(x) Housecraft vocational education - a course of education and training in respect of which more than eight hours per week are devoted to prescribed housecraft subjects;

(xxi) Technical vocational education - a course of education and training (theoretical or practical or both theoretical and practical) which includes education and training in any prescribed trade but excludes education and training in handwork.

Paragraph (vii) of the same article also defines handwork as a course of education and training in woodwork, metalwork or any other practical art or craft which is not specific training for a prescribed trade and the duration of which is not more than eight hours per week irrespective of the number of craft subjects followed in the course.

Thus did this particular act tend to demarcate between the two types of secondary education - vocational and vocationally-directed, and these definitions have been used until very recently when the Educational Services Act was passed. This, being the latest act

dealing with the subject under discussion, needs to be studied in this context.

1.4.4. The Educational Services Act, No. 41 of 1967.

This act, which transferred full-time, secondary vocational education back to the Provinces, was assented to on 22nd March 1967. It repealed, or in part repealed, eleven education acts and a part of the Pension Laws Amendment Act of 1956, which fact does not affect many aspects of vocational education. Section 1, paragraph xxxii defines vocational education. Since this is the latest official definition it should be noted. "Vocational education" means a course of full-time education usually provided up to a standard not higher than the tenth standard and -

(a) in which more than two subjects are commercial subjects referred to in Schedule 2; or

(b) which includes instruction and training, whether theoretical or practical or both theoretical and practical, in any trade referred to in the said Schedule, but does not include -

(i) special education; or

(ii) a course of instruction and training in woodwork, metal work or any other practical art or craft not being specific instruction or training for a trade referred to in the said Schedule 2 and the duration of which does not exceed eight hours per week, irrespective of the number of such subjects taken in such course;

Schedule 2 lists commercial subjects and trades as follows:-

1. Commercial subjects.

Bookkeeping, Commerce or Business Management, Economics, Mechanized Arithmetic, Mercantile Law, Office routine, Salesmanship, Secretarial Practice, Shorthand, Snelskrif (Afrikaans shorthand), Typewriting and a subject having a content similar to such a subject or consisting of a combination of any of the said subjects.

2. Trades.

Baking, Blacksmithing, Boilermaking, Bricklaying, Cabinetmaking, Carpentry, Diesel mechanics, Electrotechnics, Fitting, Furniture polishing, Instrument making, Joinery, Motor body repairing, Motor mechanics, Painting and decorating, Plastering, Plumbing,

Printing, Radio mechanics, Sheetmetalwork, Signwriting, Stone masonry, Tailoring, Trimming, Turning, Upholstering, Watch-making, Welding and a trade having a content similar to such a trade or consisting of a combination of any of the said trades.

Section 1, paragraph xxxiii defines a vocational school as one which provides vocational education.

Now although the purpose of the bill was to permit the re-transfer of full-time vocational schools to the Provinces, it would appear that there is a great danger of misunderstanding of terms again. It is extremely difficult to understand why, in the usual context of the term, "vocational education" has virtually been limited to full-time, secondary education, and why "higher education", in terms of Section 44 of the bill, paragraph 17, includes university education, education provided at colleges for advanced technical education, such schools of art, ballet, music, agriculture, mining, pharmacy and nautical training as may be declared, special education (for handicapped children and those under the Children's Act), part-time continuation classes and apprentice classes, full-time education beyond standard X level and any other education which may be declared to be higher education. Apart from the exclusion of full-time, secondary, vocational education, we are back precisely where we were before the passing of the Act. It is submitted that the two terms "vocational education" and "higher education" are still wrongly defined and used.

Yet a further point emerges. Up to 1967 housecraft education as provided in a housecraft high school was considered to be vocational. It is no longer mentioned in this new act and so does not enjoy the protection which the education provided at technical and commercial high schools does. The implications of this will be discussed in the chapter on housecraft high schools.

The protection just referred to is embodied in Section 9 of the Act. Paragraph (8) states that vocational education is not to be provided elsewhere than at a vocational school and paragraph (9) states that "the nature and purpose of vocational education shall not be changed without the approval of the Minister."

The other section of the Act which may prove a stumbling block is Section 13. Paragraph (1) empowers the Minister to conduct

the examinations in vocational schools, to issue certificates and to appoint examiners and moderators. The reason is not far to seek. The National Education Policy Act, which is discussed in the next section of this chapter, states that syllabuses, courses and examination standards shall be co-ordinated. In point of fact inter-departmental committees drew up common basic syllabuses in all the usual school subjects and the various education departments engaged themselves not to subtract any vital matter from these syllabuses. There is obviously some small amount of play allowed and matter may be added to a core syllabus. The Joint Matriculation Board, through its moderators, ensures a reasonably uniform standard of examining. Hence, as far as the normal provincial high schools are concerned there is little to prevent securing the satisfactory working of the Act. The problem is otherwise with the vocational schools.

Six education authorities use the syllabuses approved for the vocational schools - the Department of Higher Education, the four Provincial Departments and the Education Department of South West Africa. To discuss and recommend modifications and alterations to syllabuses, regulations, certification etc. there is an inter-departmental committee which reports through the committee of Heads of Education Departments to the Minister, whose decision is final. The appointment of examiners and moderators (other than the Joint Matriculation Board Moderators) is the privilege of the Department of Higher Education. The examinations for standards six and seven in the technical high schools are internal and controlled by the Provincial Departments for the schools in their own Provinces. All the examinations for the housecraft high schools are controlled by the respective Provinces. The examinations for standards eight, nine and ten in the technical high schools and the commercial high schools are external and set, marked and moderated by examiners of the Department of Higher Education.

Let it be said immediately that these examiners and moderators are teachers employed in the technical and commercial high schools.

Nevertheless they come, or can come, from five provinces and as such must be influenced by the approaches advocated in those Provinces and these need not, so far as emphasis is concerned, be identical. This was pointed out to the Minister after the first meeting of the inter-departmental committee which met early in February 1969. Unfortunately he has not seen his way clear to pass over the examining to the Provincial authorities as yet. Hence the system exists where standards eight and nine are internal examinations in provincial high schools and external in technical and commercial high schools, and there are different papers for standard ten in such subjects as Afrikaans, English, Mathematics and Physical Science. This does not help the already difficult task of inspectors of education who have now to be au fait with different language set books and rather different approaches to some subjects.

1.4.5. The National Education Policy Act, No. 39 of 1967.

As far back as 1915 during the sittings of the Jagger Commission (The Provincial Administration Commission) notable educationists in giving evidence suggested that education should be a national function. Dr. W.J. Viljoen proposed the abolition of the provincial system, Dr. J.E. Adamson advocated national control and Dr. C.T. Loram said that education should be administered by a non-party national board of education. The Commission recommended that, after the ten year period from the date of Union, this should occur. Because of more urgent problems at the end of this period, the recommendation was never given effect to.

The nearest approach that has been made to this proposal was the creation of a Provincial Consultative Committee consisting of representatives of the Cabinet and of the Provincial Executive Committees. Some mention of its work has already been made.

There was also a National Advisory Board created in 1912 to advise on matters of technical, industrial and commercial education and this continued in existence until 1918 and did very valuable work in creating an examination system and an organized scheme of work in the various vocational education fields.

It is to be noted though that no board has been created with executive powers and this seems to be an incomprehensible state of affairs especially when one considers the very talented persons who have been members of the various consultative committees appointed since Union.

In 1951 the Committee of Heads of Education Committees agreed again to recommend the appointment of a National Advisory Council for Education (i) to deliberate on and make recommendations to Administrators and Ministers in respect of the broad principles of a general education policy for the Union and the general co-ordination of educational services;

(ii) to report on all matters referred to it by the Government; Union or provincial education authorities or by Parliament;

(iii) to promote educational research;

(iv) to promote the compilation of systematic statistics of all education; and

(v) to examine all legislation on educational matters in the Union and to submit recommendations thereon.

The Cabinet found itself unable to sanction funds necessary to create this board. [1]

The matter did not rest there. On 1st. February 1955, Mr. Dirk Mostert, M.P. introduced a motion in Parliament stressing the need for a uniform and co-ordinated education policy in South Africa. [2] *On the 21st. day of the same month the Afrikaans Churches submitted a memorandum emphasizing the need for a Union-wide education policy and proposing a Union Board of Education. This was referred to the Committee of Heads of Education Departments.* [3] *The Suid Afrikaanse Akademie vir Wetenskap en Kuns devoted its annual meeting from 30th June to 2nd July 1955 to various aspects of education.* [4]

The Secretary for Education, Mr. H.S. v.d. Walt, welcomed these

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1. *Annual Report of the Department of Education, Arts and Science, 1951. p.7.*
2.3.4. *Annual Report of the Department of Education, Arts and Science, 1955. p.7.*

moves because, he said, "the general public has in the past paid too little attention to education. Consequently the system of education has in many respects failed to keep sufficiently abreast of the rapid socio-economic developments and changes experienced by the Union in recent years." He went on to say that "it is strongly felt that the establishment of a properly co-ordinated system of education in South Africa has become a necessity. This would require careful planning in view of the fact that there are widely divergent ideas on the nature and extent of a uniform system of education and the way it is to be achieved." [1]

It should be noted that these remarks were made in the same year when the Vocational Education Act, No. 70, of 30th September 1955, was passed and attempted to draw a proper distinction between vocational and general education, to ensure a proper distribution of educational functions, to co-ordinate vocational education and to take over the technical colleges. The Department undertook a very large task indeed. Undoubtedly much good came from it but subsequent developments, as for example the passing of the Educational Services Act, 1967, the creation of colleges for advanced technical education with a good deal of restored autonomy, and the passing of the National Education Policy Act, surely show that the time was not then ripe for nearly as centralized a system of education as this.

To return to the question of a National Council for Education, at the instigation of the Administrators such a council was decided on, the Minister of Education as chairman, the four administrators as members (South West Africa elected to be omitted) and with the Department of Education, Arts and Science as the Secretariat. Its first meeting was on 30th October 1957. [2] It was decided that the Committee of Heads of Education Departments be retained as an advisory body.

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1. Ibid. p.7.
2. Annual Report of Department of Education, Arts and Science, 1957 p.21.

Act No. 86 of 1962 provided for the establishment of a National Advisory Education Council. The first chairman was Professor Rautenbach, Principal of Pretoria University. There was a full-time executive committee of this council with its offices in Pretoria.

This council remained in existence until the National Education Policy Act, No. 39 of 1967, made the appointment of a new council necessary.

Section 2, paragraph (1) of this act prescribes ten principles which provide the framework of a national education policy. Very briefly these principles are

(a) that education in the maintained schools shall have a Christian character;

(b) that it shall have a broad national character;

(c) that instruction shall be in the mother tongue (i.e.) English or Afrikaans;

(d) that the requirements as to compulsory education, and the limits relating to school age shall be uniform;

(e) that education (including books & stationery) shall be free;

(f) that education shall suit the abilities, interests and aptitudes of the pupils;

(g) that syllabuses, courses and examination standards shall be co-ordinated;

(h) that the parent community shall have a voice in educational affairs;

(i) that the recognized teachers' associations shall have a voice in educational affairs;

(j) that conditions of service and salary scales of teachers shall be uniform.

Section 4 of the Act relates to the establishment and functions of a National Advisory Education Council. The "advisory" nature is again to be noted. There seems to be a great fear of establishing a "Board of Education" with any executive powers, no matter how this board be constituted.

Section 6 constitutes a committee of educational heads (i.e.) the four Provincial Directors of Education together with the Secretary

for Higher Education as chairman. The purpose of this committee is to submit recommendations to the Minister and the Administrators on matters of educational policy particularly in regard to securing co-ordination.

1.5. The Problem

In broad outline has been sketched the origins of vocational education, the devious ways in which it was separated from the Provinces in which it originated, and the way in which it has now been restored. To suppose that the problems associated with vocational education will now be easily solved is likely to prove far from true. Virtually the real and fundamental problems remain. There is not yet a permanent arrangement about the subsidising of vocational education. This is awaited. The Provincial Authorities have not yet the real control of the examining and, therefore, not of the approach to the teaching of subjects common to all types of schools. They may not, without ministerial permission, open new vocational schools nor include in the curricula of existing schools more than a certain amount of vocational work.

A sub-committee of the previous National Advisory Education Council reporting on vocationally-directed education for boys [1] *had a good deal to say about what is becoming a very real problem in South Africa. Paragraph 5 of their report says " (a) The changing structure of the labour force in South Africa, in common with other industrialised countries, reflects the need for more skilled workers and fewer unskilled and a national education system must provide the foundation for producing the manpower not only skilled but endowed with a sense of responsibility and pride of workmanship.*

(b) The greatest expansion is likely to occur in some of the very highly skilled occupations and pre-requisites for these are good general education and good degrees of skill.

(c) Because of the limited supply of white labour, education of lower intelligence groups to a higher level than heretofore is necessary.

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1. *National Advisory Education Council. Report of the Committee on Vocationally-Directed Education for Boys up to Standard X or Matriculation. October 1968.*

5(a), (b) and (c) indicate for each individual as much general education as possible supplemented at various stages by vocationally-directed and vocational education corresponding to interest, aptitude and ability."

The purpose of this sub-committee was to suggest how to develop to the full a system of vocational education which, by aiding the fullest possible development of the individual's potential through differentiated education and guidance, will assist in the growth of the national economy. This they said "involves a search for the best possible scheme of school organisation and functioning for the requirements of the future as provided for in the acts which ended divided control". (Paragraph 6)

One of the significant remarks made in the report in paragraph 5.3. was that three-quarters of school boys will have to prepare themselves for jobs in industry, technical or professional. We find somewhat similar remarks in the Report of the Royal Commission on Education in the Province of Quebec. "All large Western education systems provide for the technical and vocational training of citizens within the structure of the school system. It is generally recognised that for any country this is a long-time investment of the highest importance. ..... The sole traditional cultural criterion - literary culture - is now not outdated but it is only a part of the whole. In our cultural environment, it is as important to train engineers as it is to train writers, and to have, in adequate numbers, men capable of directing regional development, of constructing highways, of harnessing rivers and of building well-ordered towns.

The humanism and the general culture to be imparted to a student should be a humanism and a culture with a field of concentration, whether literary, scientific or technical." [1]

There was an article written in an American educational journal some years ago. The title was "Some Educational Problems". The author

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1. *Report of the Royal Commission of Inquiry on Education in the Province of Quebec. 4/2/65. Government of the Province of Quebec. Part Two. p.48.*

is now not known to me but some of the things he wrote are of tremendous significance in the present situation in South Africa. "The aim of education is excellence in individual achievement, excellence in standards of personal conduct and tastes and excellence in moral responsibilty. Consider again the modern trend to seek out your geniuses by all sorts of peculiar tests and then lavish upon them all the glamorous trappings of an education in the hope that they will bring forth new missiles, new satellites and new instruments of power. The approach is wrong. The real war in which we are engaged is not one of nuclear annihilation - no nation can afford that. The war is one of political and economic competition. To win this contest we have to develop the full potential of all of our people. This implies the mobilisation of education from the nursery school to the university. We cannot win this war with the continued wastage of the culturally deprived and neglected children ..... . To harness all our potentialities requires an educational overhaul in curriculum, methods and teacher training ..... ."

This is the correct method. This is the theme it is hoped to develop. A wonderful opportunity has been presented by passing back to the Provinces all education "other than higher" and "special". What is needed now is for the powers-that-be to persuade the Minister that a re-thinking of the primary and secondary education system is necessary to ensure Ruskin's ideal, "The training which makes men happiest in themselves also makes them most serviceable to others".

CHAPTER 11

The Technical High School.

2.1. Introduction

In the Report on Public Education written by J. Rose Innes, the first Superintendent-General of Education of the Cape Colony, in 1854, the following statistics are given:

First Class Schools	Years	Number of Pupils through Senior Course	Number proceeding to Industry or Commerce
Normal or Model School, Cape Town	1842-1853	331	112
Graham's Town Government School	1841-1853	430	150(artisans)
Uitenhage	1841-1853	592	80(artisans)
Port Elizabeth	1853 only	26	20

Unfortunately other schools gave no details of the employment to which their pupils proceeded. The interesting point to note is that, even in that early period, there were certain industries but no attempt had yet been made to introduce any form of vocational training for European pupils. In point of fact, the earliest system of vocational education was introduced in 1855, when Sir George Grey was Governor of the Cape Colony, for Native children in mission schools and in 1861 for Coloured pupils in mission schools,[1] and some attempt was made in 1873 to encourage an industrial department in district boarding schools by giving a £50 grant towards such a department. These district boarding establishments grew very slowly, and as far as the industrial department part of them was concerned, Dr. E.G. Malherbe attributes this to the fact that farmers did not favour them, considering them "superfluous and uneducative".[2] Mrs McKerron supports this opinion but adds that the farmers supposed that the children would pick up what they wanted of industrial processes on the farm and also that it was difficult to get competent teachers for industrial education. These departments were never widespread and by 1909 there were only two district boarding schools

1. Report of the Commission on Technical and Vocational Education. UG 65/1948. p.5.
2. "Education in South Africa" op cit. p.102.

left, the place of the others having been taken by the boarding departments attached to A1 and A2 schools.[1]

The Cape Government appointed an Education Commission in 1891, presided over by Sir Jacob Dirk Barry, Judge President of the Eastern Districts Court. One of its terms of reference was how to secure further use being made of the opportunities afforded for education. It appears from the report that there was a problem of poor attendance at all types of schools. Only 73.5% of enrolled European children were in regular attendance. Enrolment, in those days, was not compulsory and as a result only 13% of the children reached standard IV or a higher standard.[2] The reasons given by the Commission were that parents were ignorant of the facilities provided by the Education Department and of the value of school training. This indifference was evidenced by their neglecting to send children to school and by their readiness to keep them away on the flimsiest of excuses. There was, in addition, much truancy on the part of the children. Poverty drove parents to demand, at an early stage, their children's assistance in the home or in helping to defray the expenses of the family. In other cases it prevented parents from sending their children to schools where fees had to be paid and where they had to be decently clad, fed and housed. To these factors must be added the scarcity of domestic servants, farm labourers and shepherds. Finally, the Commission indicated the lack of suitable buildings for use as schools, and the shortage of teachers, books and educational appliances.[3]

The Commission also drew attention to the need for industrial education. " ..... and not only must we lay our plans to catch the technical educates of the future while they are yet young, but we shall certainly have to feel our way as we go .... . Our people have made little sign as to the direction in which they are likely to specialise themselves industrially."[4]

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1. "A History of Education in South Africa (1652-1932)" op cit. p.70
2. Report of the Cape Colony Education Commission, 1891-92. pp.6 & 7.
3. Ibid. p.9.
4. Ibid. p.36.

Possibly as a result of this report, Proclamation 388 of 3rd. October 1893 gave permission for the establishment of trade schools and for these to be financed on the same basis as those mission schools for Natives which provided industrial training. These grants-in-aid were based on the 1861 Education Commission's recommendations. "Both Mission Schools and Aborigines' Schools were classified into three grades on the basis of staff and enrolment. The annual grants-in-aid which were to be expended on teachers' salaries only were: for Mission Schools, £75, £30, £15 for Classes 1, 11, and 111 respectively; and for Aborigines' Schools, £140, £40 and £20 ... . A maintenance grant of £15 per annum was to be made to each of a limited number of male Natives who apprenticed themselves for a period of not more than four and not less than two years, in the wagonmaking, blacksmith's, tailoring, shoemaking, and printing trades ..... ." [1]

The public concern, too, may have had some effect in causing the publication of the Proclamation. In the Cape Argus of 25th. October 1892 it is written "What to do with our boys promises to become as troublesome a question in this new country ..... as in the outworn communities of the old world. It is not merely that the commercial and professional classes in towns find it difficult to place their sons satisfactorily in the way of attaining a position equal to that of their fathers. The difficulty extends to the sons of working men, and what is more serious for the future of the country, to the sons of the farming population."

And on 14th December of the same year in the same newspaper we read "Some Parliamentary action will doubtless be taken ..... . Of course there have always been poor whites in the colony: but ..... it would appear that the class is growing in numbers and sinking in condition every year. ..... There are poor white children in both town and country whom it is most desirable to bring under the schoolmaster without further delay."

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1. C.T. Loram. "The Education of the South African Native" London. Longmans, Green & Co. 1917. p.50

The Dutch Reformed Church believed that the key to the solution of the problem of the Poor White was to be found in education and training.

Dr. Muir in his annual report for 1893 referred to this permission to start industrial schools and wrote that "it is possible that two Trade Schools will soon be started".[1] This happened. In 1894 and 1895 industrial schools were started, one in Cape Town and the second in Uitenhage. Further reference will be made to each of these schools but the first point to be discussed is the opinion that is often expressed that such schools were so long delayed in South Africa. There are many factors which affected the situation but, in comparison with many European countries, this date was not particularly late. For example, the German vocational school system, with which the name of Georg Kerschensteiner, Director of Education in Munich in 1895, is usually associated, developed from a further education scheme which started in some länder early in the nineteenth century. By the end of the nineteenth century this berufschule scheme had become general throughout the country but mostly in the form of part-time institutions. (School attendance, even if part-time, in West Germany is compulsory from the age of six to the age of eighteen.) There are, however, some 1307 berufsfachschule attended by about 160 000 students which are full-time trade schools.[2] And it was only as a result of the reports of the Royal Commission on Technical Instruction (1882-1884) that any form of Junior Technical School was eventually started in England from 1900 onwards.[3] Thus, as far as the date of the establishment of the first industrial schools for Europeans in the Cape Colony is concerned, it was not late in time.

Adriaan Smuts gives eleven reasons why this vocational education for Whites was slow in developing, namely:-

1. The severe financial retrenchment which preceded the South

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1. Annual Report of Superintendent-General of Education, 1893. p.29.
2. Paderborn. "Berufsausbilding in Industrie, Handel, Handwerk der Bundesrepublik Deutschland" Bonn. Ferdinand Schoningh. 1960. pp. 124 - 129.
3. "The Education of the Adolescent" (Hadow Report) London. H.M.S.O. 1927. Reprinted 1960. p.32.

African War.

2. The effects of the South African War and the long period of depression that followed it.

3. Recurrent droughts.

4. Cattle diseases.

5. Competition with better trained commercial and industrial newcomers..

6. The competition between the unskilled White worker, the Coloured and the Native.

7. Racial difficulties.

8. Language disabilities.

9. The sparsity of the population.

10. Expensive transport.

11. Retarded administration owing to great distances. [1]

It is, of course, obvious, that these factors had a deleterious effect upon all forms of education but the effect upon a type of education just being introduced must have been relatively greater.

James Rose Innes, in the 1854 report previously referred to, wrote "To me, the most feasible and desirable plan appears to be to invite the co-operation of the Presbyteries or Synod of the Dutch Reformed Church. The inhabitants of these districts (country districts - author) may be said to belong exclusively to that community." [2] *It will become apparent in this and subsequent chapters how much education in general, and vocational education in particular, owes to the efforts of this Church. Adriaan Smuts reminds us of this. "The early beginnings of trade education can be traced back to the industrial schools established by the Dutch Reformed Church in the nineties, and their extension after the South African War to train poor White boys from rural areas ..... . On how small a scale these efforts were, is shown by the fact that there were only 400 pupils in the trade schools at the time of Union."* [3]

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1. "The Education of Adolescents in South Africa" op cit. p.77.
2. Annual Report of the Superintendent-General of Education, 1854. op cit. p.12.
3. "The Education of Adolescents in South Africa" op cit. p.77.

There are a few more facts to be noted before the background against which technical vocational education was established can be fully understood. In the Cape Colony at this time the State did not undertake to provide education for the children but assisted in the process. "Consequently", reads the 1891 Commission's report, "the State indirectly declares it to be the duty of the parent to provide education. But the State does not compel the parent to provide it ..... . The parent is the only person empowered by law to enforce the attendance of the child in school; but there is no law to oblige the parent to discharge the duty." [1]

The next important statement of the Commission was significant as far as vocational education was concerned and must have had a considerable effect in the introduction of this type of education. " ..... the school work must be made more variously fitted for the scholar. There must be thousands of White children even in the towns for whom book-lore has not a complete charm. Yet these children need the discipline and the training to be had only in a school. In many of these cases, black-board drawing, wood-carving, card-board modelling and some other handicrafts and modes ..... are particularly applicable." [2]

Later in the report the Commission said that destitute children were, after due notice, and through the instrumentality and with the approval of a magistrate, apprenticed to masters or mistresses. In the contracts entered into, the master or mistress agreed to provide:
(a) Certain elementary instruction, secular and religious.
(b) Such handicraft or manual training as was determined upon.
(c) Food, lodging and other necessaries, together with such wages as were stipulated.

The Commission recommended some similar contract where parents wilfully or through neglect forced their children into educational destitution. [3]

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1. Report of the Cape Colony Education Commission (1891-92) op cit.p.10
2. Ibid. p.11.
3. Ibid. p.31.

A complete section of the report was then devoted to "Technical Education in Public Undenominational Schools". It pointed out that the general rule was, that technical education followed the establishment of industry and that it was rare indeed that through technical education an industry was started. The deduction was that the industrial aptitudes of the people needed to be revealed before specialised technical schools were started. Then came this statement, the significance of which is not yet fully recognised among educational authorities. "Before specialised technical education must come adequate general education." This point will be discussed further in a later chapter. And one more statment is worth quoting in this context. " ..... the dexterity of hand, precision of eye and directness of movement must follow while the pupil is still young enough to be receptive." [1]

The Superintendent-General of Education in his report for 1890 wrote this: "Trade classes are at present attached only to district boarding schools and undenominational public schools with which boarding departments are connected. It is requested that the privilege be extended to all public day schools. The grant is £50 per annum for a trade class which, in boys' schools, generally means a carpenter's shop frequented three hours weekly by the senior boys." Dr. Muir went on to regret the use of the term 'trade class' because the purpose of these classes was not to fit a pupil to earn a living by the instruction given in them. The purpose was to stimulate creative activity and to train hand and eye. In fact it was the beginning of the manual training classes which exist in many schools today. It is necessary to point this out because it is essential to define terms that were used somewhat indiscriminately about this time, and which cause confusion to this day.

2.2. Industrial School, Trade School, Trade Class, Industrial Department, Technical School.

In his report for the year 1909 the Superintendent-General of

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1. Ibid. pp. 35 and 36.

Education drew attention to the use of the term "industrial school". As used in the Cape Colony, industrial schools were schools for teaching trades to the children of parents in poor circumstances and were regarded as a boon - so much so that some parents offered to pay fees to have their children admitted. In these early days pupils were admitted from the age of thirteen years and the course covered three or four years. The trades taught were wagonmaking, carpentry, blacksmithing, tailoring, shoemaking, printing and bookbinding.[1]

The British usage of the term "industrial school", and the one adopted by the Union Government when it took over such schools from the Department of Justice in 1917, by authority of the Children's Protection Act 1913, is a school to which children, whose record is not bad enough to justify confinement in a reformatory, may be placed by order of a magistrate.[2] (Sometimes children are placed in such schools today because of the need for protection from pernicious influences.)

An industrial department formed part of an ordinary boarding school and was not a separate, independent school.

In his annual report for 1925 Mr George Hofmeyr, the Secretary for the Union Education Department, also explains some of these terms. "The terms "trades" and "industrial" as applied to schools have been used somewhat indiscriminately. In the past the industrial school has been taken to imply an institution for juvenile offenders in which discipline must be the chief consideration. This conception was due to the fact that schools bearing this title were at one time administered by the Department of Prisons and thus, in the lay mind, the schools were classed as being on the same basis as reformatories. This is today an entirely erroneous conception. The industrial school is neither more or less than a trades school for boys and/or girls who have been committed under the Children's Protection Act which provides for the establishment of such schools for juveniles who are indigent

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1. Report of the Superintendent-General of Education, 1909. pp. 8 & 9.
2. Ibid. pp. 8 & 9.

or are living in undesirable surroundings. From the educational standpoint the trades and industrial schools must be regarded as a single group. ..... The object of the courses and the basis of the curricula are identical, except in so far as minor modifications have been introduced into the latter to overcome difficulties arising from the impracticability of imposing an educational entrance qualification in the standard of entry into industrial schools." [1]

The scope of this thesis does not embrace the work of the Children's Act Schools. Hence when the term "industrial school" is used in describing schools started in the Cape Colony (later the Cape Province) it refers to what are now known as technical high schools. All trade schools and previously called provincial industrial schools were so re-named in 1944 when permission was given for most of the trade schools to proceed to the standard X level. [2]

The function of the trade or industrial school was to give a pre-apprenticeship training in skilled trades for those who wished to become artisans. In the early days of these schools (1895-1925) this was the fundamental purpose and so manual training took precedence. Gradually, however, even during this period it came to be realised that it was necessary to give some appreciation of the fundamental principles of mathematics and general science, of materials, of civics and of general culture. This was deemed necessary to counteract the restricted training which modern industrial developments were imposing during apprenticeship.

There was one other type of school to which reference will have to be made. These schools, started by the technical colleges, were called technical schools or, sometimes, technical high schools. The Secretary of the Union Department of Education had this to say about these schools. "The technical school aims at preparation for entry into a specific industry; the course is on a broad basis with a strong cultural element, the underlying idea being to fit the pupil for

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1. Annual Report of the Union Education Department, 1925. op cit. p.78.
2. Report of the Union Education Department for the years 1941-1945.p.5.

entry into any branch of the industry selected with a view to eventually rising to the administrative or employing ranks. For this purpose the cultural side is given considerable prominence while the industrial side is directed towards the industry as a whole rather than to a particular trade or branch; thus a pupil taking a building course will not specialise as a carpenter or plumber but will receive instruction in both of these and other branches of the building industry. The tuition is mainly concerned with the theory and principles of a particular industry, such practical work as is included being chiefly of an illustrative nature." [1]

This was the position in some technical schools but by no means in all of them. Some were very definitely run as trades schools, the one run by the Witwatersrand Technical College, for example, being called the Johannesburg Trades' School. [2] *On the other hand the Natal Technical College preferred the term 'technical high school'.* [3]

To sum up, there were industrial schools, trades schools and technical high schools. As far as the Cape Province is concerned, the industrial schools and trade schools were started by the Cape Colonial Government, by Church authorities, by the General Commission for Poor Relief of the Dutch Reformed Church and by individual members of the Dutch Reformed Church. The technical high schools were started by the technical colleges. Originally their purposes were different but as a result of the take-over from the Provinces in 1925 by the Union Government and from the technical colleges in and after 1955, they became a co-ordinated system of technical high schools. How they were started and how they developed to their present status is the theme of the remainder of this chapter.

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1. *Annual report of the Union Education Department, 1925. op cit. p.77.*
2. *"The Pietermaritzburg Technical College, 1910-1960." Pietermaritzburg Technical College. 1960. p.46.*
3. *"Natal Technical College, 1907-1957." Durban. University of Natal Press. 1957. pp. 47 & 48.*

2.3. The First Industrial Schools

It has already been said that until the last quarter of the nineteenth century South Africa was predominantly an agricultural and pastoral country. It is true that copper had been mined in O'okiep from 1852, that gold had been found at Tati in 1865, that diamonds were first found in 1867 and the diamond fields annexed to the Cape Colony in 1871. [1] Here was the beginning of the mining industry but it took many years to develop and if it is remembered that in 1872, when the Cape Government bought the railway system in the Cape, it extended only to Wellington, [2] then it is easy to realise that industry in the 1890's was directly connected with agriculture and with the building trades and that there were mills, printing works and a few small engineering workshops. The railway workshops were beginning to be established but the mining industry was remote from Cape Town and as yet had little influence on the employment of artisans.

Dr. Muir in his report for 1895 refers again to the fact that the new school regulations passed in 1893 made possible the establishment of industrial schools. He mentions two schools that started in 1894 and 1895 respectively, each of a different type.

(a) The first was in Cape Town on the corner of Breë Street and Church Street and was called the Cape Town Industrial Home. It was started through the initiative of the Reverend B.P.J. Marchand of the Dutch Reformed Church at Rondebosch and of the Reverend A. Moorrees of the Dutch Reformed Church, Cape Town. These two gentlemen called a conference, in December 1892, in Cape Town, consisting of representatives of the various churches, members of Parliament, the Superintendent-General of Education and representatives of the local press. The purpose of the conference was to discuss the Poor White problem and to try to find a solution to it.

The Cape Argus of 15th December 1892, reported the proceedings and tells us that a Commission of six members (Revs. A. Moorrees -

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1. Report of Unemployment Investigation Commission 1932. p.7.
2. L.G. Green. "Karoo" Cape Town. Howard Timmins. 1st. Edition, 1955. p.51.

chairman, S.J. du Toit, A.J.L. Hofmeyr and B.P.J. Marchand - secretary, together with the members of Parliament J.H. Hofmeyr and Jas. T. Molteno) was appointed "to bring this most important subject prominently to the notice of the Press, the Church, the Afrikaner Bond and the general public by circular, and, if needs be, also by way of public meetings."

It has been noted that regulations were proclaimed in 1893. In October of that year the Superintendent-General of Education published a memorandum on what he envisaged by an industrial home (apprentice home) where children above the usual school-going age would be lodged, clothed and fed. They would work as apprentices in local firms during the day and be taught the three R's at night. Unless such a home was undenominational no grant could be given for the rent of a building. For food and clothing there would be a grant of £15 per apprentice per year; for the salary of the superintendent an amount not exceeding £50 per annum on the £ for £ principle and towards the salary of the evening school teacher an annual grant of £33⅓ on the £ for £ principle. [1]

Moorrees and Marchand went to work immediately. By 1st March, 1894, they had bought the property on the corner of Breë and Church Streets for R2960 and by 1st July of that year had imported John Eberleen from Holland as supervisor. On 7th August 1894 the home opened with 20 boys enrolled. Their ages varied from 11 to 20 years and they came from all over the Colony - Queenstown, Willowmore, Prince Albert, Bredasdorp, Bedford, Cradock, Somerset East and Uitenhage, according to the inspection report of 26th November 1894. The pupils were indentured as apprentices in one of the trades bookbinding, cabinetmaking, carpentry, plumbing, shoemaking or upholstery. The boys attended school three evenings per week from 7.30 to 9.30 for elementary education of primary standard in the three R's from grade A to standard IV but received their practical training in the workshops and factories of the town. The Superintendent-General was enthusiastic

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1. Government Gazette of 17/10/1893. No. 1014. 1895 Report of Superintendent-General of Education. p.9.

about this school. He wrote "I think, however, that it has already been established that the Cape Town school is a marked success and that its further extension should be encouraged. From a purely financial point of view it is altogether preferable to the other; in fact, apart from local expenditure, the cost per pupil in Cape Town is, as nearly as may be, one-half of what it is in Uitenhage. In other words, if the 40 pupils at the latter place were transferred to the Cape Town Home, the saving effected would be sufficient to provide for the maintenance and training of thirty more apprentices."[1]

In his next report his enthusiasm continued " .... On account of the marked success of the former (Cape Town type), it was considered that it had got beyond the experimental stage, and ought to be extended and developed. The necessary steps in this direction have been taken, and it is hoped that next year's report will show that the number of apprentices in it has been doubled." [2] Actually the following report was that this school had made a considerable advance but the 1898 report told of the acquisition of a more commodious and suitable building and that in December 50% more apprentices were in attendance than in the same month of the previous year. [3] Unfortunately Dr Muir's best hopes were not realised and the school continued in existence only until 1902 when, because of dwindling enrolments and mounting debt, the school was closed. The maximum enrolment was 66 in 1898 and in 1902 it had dropped to 19 by mid year. [4]

The reasons given for the failure of this institution were:

(i) That, being sectarian, no grant was given towards the building. By 1896 there was a shortage of funds and after the additions to the Bree Street property, begun in 1897 and finished in 1898, the total debt was R11 800. This situation gradually became worse, according to a letter sent to the Superintendent-General of Education by the Reverend Marchand on 27/6/1898, and reported eventually by him in his report of 1902.

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1. Report of the Superintendent-General of Education, 1895. p.9.
2. Report of the Superintendent-General of Education, 1896. p.8.
3. Report of the Superintendent-General of Education, 1898. p.6.
4. Statistics extracted from annual reports.

(ii) That the teachers did not have the necessary industrial background and there was too frequent changing of staff. [1]

(iii) Because the apprentices were absent from the home during the day whilst learning their trade, that there was insufficient control and this led to disciplinary troubles. [2]

(iv) That the type of child admitted came often from a very weak home background and was not suited to the type of training. [3]

(v) That as other similar institutions opened in other parts of the Colony it was no longer necessary to send the apprentices to Cape Town.

(vi) That the institution did not enjoy the necessary support from all members of the Dutch Reformed Church in the Peninsula. This was reported as early as 31st October 1894 in the Cape Argus when the proceedings of the Synod sitting in Cape Town were reported " ... even Afrikaners of high standing had tried to interfere with the work which was now being done for the poor whites at Cape Town."

(vii) That the school hours from 7.30 p.m. to 9.30 p.m. on three evenings a week were too long for this type of apprentice, especially after a long day's work at the trade. [4]

These problems recurred and will be referred to again in Chapter 111.

(b) The school established at Uitenhage was of a different type because both the practical instruction and the academic, were given in the school. The credit for the establishment of this school belongs primarily to the Reverend D.J. Pienaar of the Dutch Reformed Church in Uitenhage, which formed one of the eight congregations of the Graaff-Reinet Presbytery. The idea of founding the school was first mooted in 1893 and he gave it unremitting attention until the establishment was an accomplished fact. The first idea was that the

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1 & 2. Report of the Select Committee on School Boards and Teachers. A11-1902. Evidence of Dr. Muir. p.263 paragraph 1927. Report of 1912 Education Commission. G17-1910. Evidence of Dr. Muir. pp. 73 - 74, paragraph 804.

3. Superintendent-General of Education's Report 1899. p.6.

4. Superintendent-General of Education Report 1902. Inspection Report. 26th February - 1st March 1902.

Uitenhage congregation should purchase a suitable site and present it to the Dutch Reformed Church of the Cape Colony. Despite the fact that the Government had expressed its willingness to give assistance to these types of schools and that it was agreed that Uitenhage was a suitable centre for such a school, and further that it was unreasonable to expect the burden to fall upon the shoulders of one congregation, the Synodical Committee of the Church declined to accept the responsibility and referred the matter to the Graaff-Reinet Presbytery.

A committee, with the Reverend C. Murray as president and the Reverend D.J. Pienaar as honorary secretary, was formed. The Reverend Pienaar preached up and down the country, appealed to all the congregations in the Presbytery and, in addition, collected privately; in a few weeks he collected £530 and this amount eventually swelled to nearly £1000. A property at the bottom of Cuyler Street, which is still a part of the school site, was purchased. It comprised ten acres of ground and a house and cost £700. It passed into the possession of the Church on 1st January 1894. The school eventually opened on 2nd April 1895.

Two initial mistakes were made which might well have spelled disaster for the new school. The first was to admit forty three boys. It should be remembered that these boys were "rough and untamed", to quote the original description, and needed to be governed with an iron hand. The second mistake was in the choice of the first principal teacher, a certain Mr. Doëge. He was a capable and efficient artisan but, unfortunately, no disciplinarian. He resigned after two years, that is to say, in 1897.

Mr Pienaar then communicated with the head of the Free Church Training School, Edinburgh, and requested him to advertise for a competent superintendent. Five applications were received for consideration and Dr Muir and the committee, each without knowledge of the other's choice, nominated the same candidate, Mr William McJannett, who assumed duty on 1st April 1898. He proved an ideal choice and the school prospered to such an extent that by 1901 extra accommodation

had to be provided at a cost of £1 400. A new dormitory building to contain 80 beds was built.

To gain admittance a boy had to be of European parentage and a pauper. He had to be between 13 and 18 years of age and it had to be agreed that once he entered the school he was under the control of the committee until his indentures had expired (a minimum period of three years). The committee undertook to feed and clothe him, to educate him until he reached the sixth standard, and to teach him one trade. Six trades were taught in the school - carpentry, joinery, cart and wagon building, blacksmithing and farriery, tailoring and shoemaking.

A number of boys attended drawing and technical classes in the morning and did practical work in the afternoon and vice versa. Each boy had to spend a certain time every day in the garden where fruit and vegetables were cultivated. The school was undenominational but the greater proportion of the boys were drawn from the poor Dutch class.

The school was not conducted with the object of making profits but there was always a small credit balance at the end of each year. In 1905, as an example, the earnings totalled £2 862.3s.3d. Materials cost £1 850, salaries of teachers amounted to £1 500 (of which £700 came from the Government), provisions cost £822 and clothing £229. The Government gave a grant of £15 for each boy (£18 in the case of those sent under the Destitute Childrens' Act.).

William McJannett taught the usual school subjects (reading, writing and arithmetic) and did the administrative work by himself until 1902 when a Mr J. Liebenberg was appointed in September to help with the ordinary school subjects.

In 1906 the eighty pupils in the school were divided in trade groups as follows:- wagon builders 23, carpenters 23, shoemakers 14, blacksmiths 11 and tailors 9. [1]

In this same year McJannett was offered a higher salary to go to a similar school in Potchefstroom. He refused the offer [illegible]

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1. W.S.J. Sellick. "Uitenhage Past and Present" A Souvenir of the Centenary 1804-1904. Uitenhage. Uitenhage Times Office. 1904.

and the committee, in appreciation, granted him a bonus of R100 and soon afterwards raised his salary from R440 to R616. [1]

In Chapter 1 it was mentioned that the Union Education Department took over all vocational schools in 1925. It was only in 1927 that William McJannett, after thirty years devoted service, retired. It can be said of him, with some justice, that he was the pioneer in the field of technical vocational education in South Africa and the methods he employed served as a model for other industrial schools throughout the land. [2]

Earlier in this chapter it was pointed out that the trades taught in the early days of industrial education corresponded to the industries then existing. As industry grew and methods changed, the trades taught in the schools were forced to change. So we find that in Uitenhage the shoemaking trade was discontinued in 1927 and wagon-building in 1931. On the other hand the blacksmithing section was extended in 1927 and motor mechanics introduced in 1933. [3]

For many years the enrolment at this school remained low. This may have been with deliberate intent on the part of the education authorities, remembering that the original purpose was to educate only the indigent boys. It may have been that the academic standard aimed at in the early years was only standard VI. This would have deterred some parents. Over a period of about fifty years the standard was gradually raised from standard VI to that of the Preliminary Technical Certificate (standard VII), later to the Trades School Certificate (approximately standard VIII), then to the Junior Technical Certificate (standard VIII) and finally to the Senior Technical Certificate (with or without Matriculation Exemption). This fact, together with the eventual admission of fee-paying pupils and the gradual lessening of the effect of the stigma which all the original industrial schools bore, may well account for the gradual increase in numbers.

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1. Translated from an article in Die Oosterlig "So het die H.T.S. op Uitenhage gegroei!" Thursday 26th October 1967.
2. Ibid.
3. Ibid.

Another limiting factor which still exists, is the accommodation available. The school is still on its original site. When the Union Education Department took over the industrial schools it had a tremendous financial burden thrust upon it. The building grants made by Treasury were limited. To overcome this handicap, schools were, for a limited period, encouraged to undertake their own building extensions. This resulted, in the case of Uitenhage, of the building of a school block and a workshop block. The hostel block remained unaltered in size though more and more beds were crammed into it. Even today when the enrolment in the school is 417, there are only 160 hostel places.

Another factor which tended to keep enrolments low in the earlier days was that Uitenhage was a small town and virtually the only industrial undertaking was the railway workshops. This situation has changed radically in the last ten years and Uitenhage is today a comparatively large industrial town with some very large industrial undertakings, like the Volkswagon factory and the Goodyear Tyre Company, employing thousands of workers, many of whom have to travel daily from Port Elizabeth because of a housing shortage in Uitenhage.

A new technical high school was planned for Uitenhage, the site being chosen in 1960 and the architects appointed in 1964. About this time, however, severe financial limitations were imposed by the Department of Finance and the building not proceeded with. It is now under construction and will accommodate 750 pupils with 360 hostel places. The trades taught at present are shown in the table on page 64.

The history of this school has been discussed in some detail because it is typical of the type of industrial school established by the Dutch Reformed Church and because it is extant.

2.4. The Salesian Institute, Cape Town.[1]

This trade school, the third opened in South Africa, is rather different from those already described, in that, even to this day, it

1. "Don Bosco in the World" Salesian Press. Turin.

PROVINCIAL TECHNICAL HIGH SCHOOLS
1969

DISTRICT	NAME OF SCHOOL	NO. ON ROLL	NO. OF BOARDERS	NO. OF TEACHERS		TRADES TAUGHT	NO. OF PUPILS PER TRADE
				MALE	FEMALE		
CAPE	OUDE MOLEN PINELANDS	589	—	33	7	BASIC TRAINING	154
						ELECTRICIANS	120
						FITTING AND TURNING	100
						MOTOR MECHANICS	122
						WELDING	47
						WOODWORKING	46
EAST LONDON	EAST LONDON	562	130	36	4	BASIC TRAINING	141
						ELECTRICIANS	101
						FITTING AND TURNING	100
						MOTOR MECHANICS	90
						PLUMBING	29
						RADIOTRICIANS	22
						WOODWORKING	79
FORT BEAUFORT	PIET RETIEF ADELAIDE	198	176	20	2	BASIC TRAINING	48
						CAR BODY REPAIRING	20
						ELECTRICIANS	25
						FITTING AND TURNING	35
						MOTOR MECHANICS	35
						WELDING	15
						WOODWORKING	20
GEORGE	P.W. BOTHA	168	88	15	1	BASIC TRAINING	85
						ELECTRICIANS	12
						FITTING AND TURNING	20
						MOTOR MECHANICS	20
						WELDING	20
						WOODWORKING	11
GORDONIA	UPINGTON	226	130	13	4	BASIC TRAINING	55
						ELECTRICIANS	36
						FITTING AND TURNING	52
						MOTOR MECHANICS	62
						WOODWORKING	21
KIMBERLEY	NORTHERN CAPE	575	170	31	5	BASIC TRAINING	157
						ELECTRICIANS	120
						FITTING AND TURNING	84
						MOTOR MECHANICS	120
						WELDING	50
						WOODWORKING	44
OUDTSHOORN	OUDTSHOORN	623	590	40	4	BASIC TRAINING	120
						BRICKLAYING	20
						CAR BODY REPAIRING	85
						ELECTRICIANS	60
						FITTING AND TURNING	57
						MOTOR MECHANICS	138
						PLUMBING	44
						WOODWORKING	99
PORT ELIZABETH	NEWTON PARK	570	—	36	6	BASIC TRAINING	146
						ELECTRICIANS	134
						FITTING AND TURNING	175
						MOTOR MECHANICS	75
						WOOD WORKING	40
UITENHAGE	DANIEL PIENAAR	417	160	25	6	BASIC TRAINING	125
						ELECTRICIANS	55
						FITTING AND TURNING	102
						MOTOR MECHANICS	90
						WOOD WORKING	45
WORCESTER	DROSTDY	466	389	34	4	BASIC TRAINING	96
						BRICKLAYING	40
						ELECTRICIANS	56
						FITTING AND TURNING	82
						MOTOR MECHANICS	84
						PLUMBING	32
						WOODWORKING	76

has to pay its own way, to a great extent, by the work produced. It was established by the Salesian Order of the Roman Catholic Church, an order which has similar establishments all over the world.

The Salesian Order was founded by Don Bosco who was born of the very poorest type of Piedmontese peasantry in 1815. At that period the Italian youth had no time for religion or Church; hooliganism was rife. Don Bosco was of superior intelligence and was fortunate enough to have a mother who was a godly person and to have a priest who was interested in him. As a result he developed the inclination for, and received the education necessary for, entry to the priesthood of the Roman Catholic Church. Having, at first hand, experience of the plight of the poor at that time, he devoted himself to the education and trade training of the children of the poor. He lived until 1888, by which time the Order had been officially created and had been given as its patron saint St. Francis of Sales (whence the name of the Order).

The school in Cape Town is in Somerset Road and until 1970 has taken about 90 pupils. During 1970, to meet the most recent need it has reduced the dormitory accommodation and increased the classroom accommodation to take 150 pupils. It trains them in carpentry, fitting and turning or one or other of the printing trades, as well as providing them with the academic education usually given at technical high schools. It is dependent to a great extent on the income derived from work done in the workshops but does receive a small subsidy from the Department of Social Welfare and from the Provincial Education Department, the subsidies between them amounting to about R3 000 per year.

The school is well-known for its work in the re-habilitation of wayward boys and for the care it gives to boys from broken homes and is particularly well-known for the quality of its printing work and bookbinding.

2.5. A Farm Industrial School

Dr. Muir's 1896 annual report has already been referred to in connection with the Cape Town Industrial Home. In it he did mention another important matter, however. He suggested that agriculture

should be taken up at the Uitenhage Industrial School (and it was for a short time), and then he went on to say "The need for attending to agricultural education cannot be questioned; in the end more farmers will be wanted than tradesmen and it would, therefore, be a great mistake to produce only the latter. Of course field and garden work would not be the only occupations engaged in, because a certain amount of instruction in woodwork and metalwork could not be dispensed with. The difference from the present system, however, would be that these subjects would not be taught as trades; they would only be entered into as far as might be requisite for use on an up-country farm. If the zeal of the Uitenhage promoters should be successful in showing that a Farm Industrial School of this kind is capable of realisation, and that it can be economically worked, they will have solved one of the most important problems which press upon us." [1]

Agriculture never amounted to very much at Uitenhage although boys were, at one period, expected to do their stint in the school vegetable gardens. Nor was this the beginning of the agricultural high school system. This is dealt with in a later chapter. But Professor de Vos of Stellenbosch took up the suggestion, so says Dr. Muir in his next report,[2] and it was hoped that in a year or two some evidence would be forthcoming of the chances of success in this direction. No further reference was made to this school, called the Stellenbosch Boys' Industrial Home, until the 1898 report when Dr. Muir wrote "The Farm Industrial School at Stellenbosch has also made progress, but more time must elapse before a confident opinion can be expressed as to its success."[3] In that year there were 39 boys in the school. It continued in existence until 1914 when the enrolment was again 39. Why it closed is not recorded. In addition to agriculture, blacksmithing, carpentry, saddlery, shoemaking and tailoring were taught. The highest academic standard reached was standard IV.

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1. Report of the Superintendent-General of Education, 1896. op cit. p.8.
2. Report of the Superintendent-General of Education, 1897. p.8.
3. Report of the Superintendent-General of Education, 1898. p.6.

2.6. Paarl Boys' Industrial School and Worcester Industrial School

These two schools were the last of the very early industrial schools established. The Superintendent-General of Education's 1899 report records that there were now six industrial schools for boys, all of them having come into existence since 1894. The Paarl school lasted only four years and the trades taught were wagon building and carpentry. The Worcester Industrial School has had an interesting history and is today known as the Drostdy Technical High School. Before describing this school, though, it would be as well to discuss that part of the 1899 report which deals with boys' industrial schools. "Unfortunately," wrote the Superintendent-General of Education, "most of them are managed in an amateurish fashion, the teachers placed in charge having in almost every case had no previous training for such special work. Notwithstanding the best intentions of the promoters, therefore, the work done in them is not nearly so effective as it might otherwise be. The finances also of most of them are in an unsatisfactory state, no methodical attempt being made to provide a local contribution in some definite ratio to the Government grant. Another regrettable fact is that in many instances unsuitable children have been admitted - unsuitable either as regards age or as regards the circumstances of the parents ..... . Meanwhile it is quite clear that it would be most imprudent to add a single additional school to the list." [1] In point of fact no other industrial school for boys was started until 1906.

To return to the Worcester Industrial School. The establishment of "Het Boeren Zending Instituut" was something unique as far as the mission work of the Dutch Reformed Church was concerned.

During the second Anglo-Boer War, Boer prisoners of war were held in outpost-camps by the British. A commission of the Dutch Reformed Church arranged for ministers to visit these camps to ensure the spiritual welfare of the prisoners. Some of the prisoners-of-war

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1. Superintendent-General of Education's Report for 1898. p.6.

indicated a desire to return to their fatherland and train as ministers and missionaries. There were 175 volunteers to be trained for this work and the Church, gratefully accepting the offer, appointed a commission comprising the Reverends J.R. Albertyn, W.A. Alheit, T.F.A. de Villiers, G.J. Hugo and J. du Plessis to investigate the possibilities of training these men.

It is to be remembered that the opportunities for obtaining a thorough school education in the days before the Anglo-Boer War, in the two republics, were very limited and that, therefore, these volunteers had to begin from the bottom of the educational ladder. In addition, it was obvious that they could not fit into the usual school pattern. Hence the Commission looked for a building to serve as a boarding school and eventually acquired the Drostdy at Worcester together with $2\frac{1}{2}$ morgen of ground for R16 000, of which amount the Worcester congregation contributed R4 000. It was estimated that it would cost R48 per year per student for schooling and boarding, and an appeal was made to congregations, to associations and to individuals to guarantee amounts of R48 for three years. The reaction was favourable and the guarantees quickly mounted to 231.

A missionary conference was held in Worcester from 11th to 13th February 1903 and at the conclusion of the conference the Drostdy was on the afternoon of Friday 13th February, officially opened by the Reverend J.H. Hofmeyr. Eighty students were accommodated in the Drostdy and the other forty in the town. Some of these students eventually matriculated at the local high school and ten became ministers, eighteen missionaries and six teachers. Others returned to their own areas to undertake rehabilitation work.[1] This institute, of course, was not an industrial school, but was the means by which the building and site for one were obtained.

After this initial enterprise the school was continued as an industrial school, with grants from the Cape Colonial Government,

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1. "The History of Worcester." Unpublished thesis for M.A. (Cape Town) by R. Grebe.

from 1908. The initial enrolment was just over twenty pupils, the trades taught being carpentry and joinery, agriculture, shoemaking, harnessmaking, tailoring, wagonbuilding, blacksmithing and cart trimming. The old Drostdy continued to be used as a hostel, a principal's house, classrooms and offices, but in due time, because of increasing enrolments, workshops and classrooms had to be added on additional ground purchased for the purpose. The Drostdy then became a hostel only and in recent years two new hostels have been built. The enrolment today is 466 with 389 boys in hostels. The trades now taught are shown in the table on page 64. The reasons for the rapid growth in recent years are the same as those given for the school at Uitenhage. Architects are currently busy with plans to extend the school to take 600 pupils and this is indicative of the upsurge of interest in this type of education.

2.7. 1906 - 1922. [1]

In this period nine other industrial schools and/or departments were opened through a variety of agencies. Details are given in the 1922 annual report of the Superintendent-General of Education, Dr. Viljoen. In chronological order the schools were -

(a) The Adelaide Boys' Industrial School established in 1906 by the efforts of an individual member of the Dutch Reformed Church, the Rev. J.H. van Wyk, and aided by the Provincial authorities. This school is still in existence and is being entirely replanned as will be discussed in Chapter 111.

(b) The Oudtshoorn Industrial School was also established by an individual member of the Dutch Reformed Church in the year 1913 and given grants-in-aid by the Provincial Administration. This school, also, is still in existence and is today a large school. For many years, as the table on page 70 shows, the enrolment was under 50. Then some girls were admitted for commercial subjects in 1927 and the

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1. All information in this section from 1922 Report of Superintendent-General of Education and from departmental statistics where available.

CAPE INDUSTRIAL SCHOOLS 1894 - 1924

	SCHOOL	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	TRADES
1906	10													23	32	28	29	34	48	51	45	81	83	69	76	69	75	29	33	84	95	91	BLACKSMITHING FURNITURE MAKING CARPENTRY WAGONMAKING
1894	1	30	40	45	48	56	55	36	17	19																							BOOKBINDING CABINET MAKING UPHOLSTERY CARPENTRY PLUMBING SHOEMAKING
	11																													16	16	23	CARPENTRY FURNITURE MAKING
	8																								28	24	25	26	51	59	60	60	CARPENTRY FURNITURE MAKING
	12																														16	16	BLACKSMITHING WAGONMAKING
	9																											17	12	7	7	16	SHOEMAKING
	7																				38	50	50	48	49	49	38	34	44	38	51	49	BLACKSMITHING FURNITURE MAKING CARPENTRY WAGONMAKING AGRICULTURE
1900	5							13	13	5																							WAGONMAKING CARPENTRY
	13																														5	17	AGRICULTURE JOINERY BLACKSMITHING
1879	4						33	33	43	45	49	51	72	72	68	82	84	83	76	96	93	111	112	110	114	107	115	114	104	110	95	120	BOOKBINDING SHOE REPAIRING PRINTING CARPENTRY JOINERY TAILORING
1898	3					34	43	43	25	18	34	29	34	36	44	36	34	31	39	38	45	39											AGRICULTURE BLACKSMITHING CARPENTRY SADDLERY SHOEMAKING TAILORING
	10																												13	16	16	23	CARPENTRY JOINERY
1895	2		41	40	39	34	48	42	38	45	60	77	74	74	70	72	73	74	78	73	75	71	72	96	105	105	102	100	102	71	95	83	CARPENTRY JOINERY BLACKSMITHING AGRICULTURE
																														12	11	18	MOTOR MECHANICS
1899	4						26	26	16	6	21	27								44	61	61	49	68	80	76	87	79	78	71	75	72	CARPENTRY JOINERY AGRICULTURE TAILORING SHOEMAKING CART TRIMMING HARNESS MAKING WAGONMAKING BLACKSMITHING

numbers jumped to about 100. In 1936 these girls, and some boys, shifted to another site and formed a commercial high school, (see Chapter IV) and the numbers dropped back a little, but not as much as previously because more accommodation was available. In January 1946 the school shifted from the original site (now occupied by the Petra School of Industry for Girls in George Road) to the R.A.F. Air School, No. 45, on the outskirts of Oudtshoorn where it was joined by the industrial school from Knysna. From that date onwards the school has grown rapidly in size. (For details see the tables on pages 86 and 103) At present the school is being replanned on a new site because the military authorities need the present site for extension of their own activities. The new school will cater initially for about 600 pupils with about two-thirds in hostels.

(c) In 1917 the Knysna Edinburgh Industrial School was opened and maintained by the Provincial Administration and became a reasonably large school of about 100 pupils in a few years. As may be expected from the location of the school, the trades taught were carpentry, joinery and furniture making. As mentioned above, for reasons of economy, this school ultimately combined with the Oudtshoorn Industrial School.

(d) In 1920 the Provincial Administration opened a single-teacher industrial department at Montagu in connection with the indigent boarding house there. It was, of course, small and taught only shoe-making. It existed only until 1925-6.

(e) Something very similar happened at Ugie where a single-teacher industrial department teaching carpentry and joinery was established by the Provincial Administration in conjunction with an indigent boarding house.

(f) Yet another industrial establishment was opened in conjunction with the indigent boarding house at Willowmore and taught, of all trades for a small dorp in those times, motor mechanics! Dr. Viljoen commented in this connection. "It is to be regretted that the Department was not consulted in the first place, in the establishment

of this school, for the suitability of Willowmore as a centre for a motor industrial department is open to doubt. When the Department was first called in to frame a special curriculum for the new institution, it was already a going concern. Since then difficulties, principally of a financial and staffing nature, have interfered with the progress of the school, for the efficiency and organisation of which the Department is held responsible. If it is not possible to meet the essential needs of the school, the Department would as lief have it closed down." [1] Who was responsible for this piece of blundering is not apparent but the life of the school was only three and a half years.

(g) A new industrial school was opened at Karreedouw during 1922 to teach the poorer boys of the neighbourhood carpentry, joinery and furniture making. There were then extensive forests in that area. It continued in existence until 1942 when, for reasons of economy, its pupils were transferred to other schools.

(h) The Goedemoed Industrial department was opened at Robertson in 1923 to teach agriculture, blacksmithing and joinery. It had a life of only two or three years and was closed when the Union Education Department took over these schools.

(i) In the same year yet another single-teacher industrial department was opened at Lady Grey in the North East Cape. Blacksmithing and wagon building were taught but again the life of the school was, perhaps, three years and it was closed by the Union Education Department.

One of the difficulties with these one-teacher industrial departments was to find an adequate supply of instructors with any elementary idea at all of teaching practice. There was a proposal to train some men at Uitenhage and women at Adelaide but although the scheme was started under the Provincial Administration (Ordinance No. 5 of 1921) and fifty pupil-teachers were accepted,[2] there seems to be no record of any further development of this scheme, certainly not as far as the schools taken over in 1925 by the Union Department

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1. 1922 Report of the Superintendent-General of Education. op cit. p.26.
2. Ibid.

of Education were concerned.

2.8. The 1922 Superintendent-General's Report on Reform in Industrial Education.

Dr. Viljoen was quite obviously not happy about the state of affairs in the industrial schools and departments. He mentions in this report that it had been recognised for some time that the work of these institutions was not proceeding on well-organised lines. The Department had apparently been trying to improve matters by exercising closer supervision over the training given, by raising the standard of admission, as far as possible, for all apprentices, and by formulating and applying definite syllabuses of practical work and book instruction. Unfortunately, by reason of existing conditions, it had not been possible to carry out effectively all the measures of reform. "From the point of view of the state, no less than that of the educationist, it is imperative that all industrial school work should be on the best organised lines, especially as industrial training is one of the most costly branches of education. Further, it is essential that the training given should be definitely related to the life of the community, if there is to be justification for the expenditure involved." [1]

Dr. Viljoen went on to attribute the postponement of the effective reform of industrial education to the fact that some institutions were controlled by the Union Government and some by the Provincial Administration. A second factor was the varying forms of management even in the Provincial establishments and a third factor was the varying types of apprentices catered for. [2]

He then went on to say that the Rev. J.H. van Wijk, Organising Commissioner of Indigent Boarding Houses and Industrial Schools, and Mr. A. Burns, Departmental Instructor in Manual Training, had been asked to prepare a report on these industrial schools and departments. This was presented in 1923. (C.P. 2 of 1923)

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1. 1922 Report of Superintendent-General of Education. op cit. p.27.
2. Ibid. p.27.

2.9. *Special Report on Industrial Schools and Industrial Departments in the Cape Province.*

The terms of reference of this committee were, in brief, to satisfy itself of the efficiency of the management and of the instruction given in any institution, to offer suggestions with a view to economy in expenditure either by the Administration or by the management, to draw attention to any overlapping which would permit of any department of work being discontinued and the apprentices concerned being transferred to another institution where provision was made in their trade. In addition a general report was asked for, elucidating the position and for the purpose of embodying any general recommendations.

The committee visited institutions of the type in question including some under the control of the Union Government. It also interviewed employers of labour and consulted with any who showed interest in the industrial development of the country and in the solution of the Poor White problem. In addition it visited the Technical College in Cape Town.

Part 111 of the report first defines the industrial school and then gives a brief description of how these schools started. Then the first criticism is given, that changes in trade processes were not kept sufficiently in view; as a consequence the results being obtained in the schools were not wholly satisfactory.

Its second complaint was the lack of uniformity in regard to terms of admission, periods of instruction and grants-in-aid. This was due to the fact that the schools had been established under different laws and administered by different departments. It quoted cases:-

(a) With regard to admission:

(i) According to the first prescribed terms of admission, which were still observed in some institutions, no child who had passed standard 1V or was over 16 years of age, could be admitted.

(ii) For schools like Knysna, Karreedouw, Adelaide, Worcester, Oudtshoorn and Uitenhage the child must have passed standard V1 and

and be at least 14 years of age.

(iii) For single-teacher industrial departments, the child must have passed either the VIth. standard or attained his 16th. year.

(iv) In schools aided by the Union Government children might be admitted at any age up to 16.

(b) With regard to periods of instruction:

(i) In certain girls' industrial schools (see next chapter), the period of instruction was three years, but the age for leaving the institution was 16 years.

(ii) In the state-aided church schools the period of instruction was three years, or such longer period as may have been determined by the Administrator, but the apprentice was not allowed to leave the school before his eighteenth year.

(iii) In single-teacher industrial departments, the regulation stated that the pupil should be indentured for a period of not less than two years, or such longer period as the Administrator may have determined.

(iv) In Union institutions, the pupils had to remain in the institution till their eighteenth year, and were still controlled in their apprenticeship or service till their twenty-first year.

(c) With regard to maintenance grants:

(i) The maintenance grants to single-teacher industrial departments was £18 per pupil per annum.

(ii) The maintenance grants to church-established industrial schools was £26 per pupil per annum.

(iii) In Union schools the maintenance grant was £24 per pupil per annum. The same amount was contributed by the Union Government in all such cases where children committed under Act No. 25 of 1913 were enrolled in Provincial industrial schools. (The Union contribution should have been at least equal to the annual cost per pupil to the Provincial Administration.)

(d) With regard to salaries.

The principal teacher at one girls' industrial school received a salary of £72 plus free board and lodging, whereas the principal

teacher of another girls' industrial school drew £272.10.0 from which £50 was deducted for board and lodging. "At an industrial school under the Union Government the principal teacher received £234; the two assistants £198 and £186 respectively, from which £39 in each case was deducted for board and lodging.

(Note - A similar differentiation in salaries obtained in respect of other members of the different staffs.)

"In making these comparisons," they said "we have not lost sight of the fact that some of these schools were established by churches and charitable associations, aided on the £ for £ principle, and that the lower salaries in some of these aided schools are due to the fact that the promoters were unable to increase the local contribution required of them to obtain the higher grant from the Provincial Administration.

In connection with this it should be further noted that the grants to non-European industrial schools are on a more liberal basis in respect of rent and salaries - the rent-grant for new buildings being fixed by law at 3%, and the salaries in full or on a two-thirds basis."

Having pointed out the lack of uniformity in the above matters, the committee expressed itself on the matter of the instruction given and received in industrial schools, pointing out that as economic conditions changed, trade processes changed. In some Union Education Department schools and some single-teacher industrial departments machinery to cope with the changes had been introduced and new trade and trade practice syllabuses introduced but it was necessary to treat all industrial schools alike.

The committee then compared costs per unit per annum in various types of industrial schools and found some fairly large differences. In Union industrial schools, for example, the unit cost varied from £60 to £140, in single-teacher industrial departments from £34 - £92, in industrial schools wholly maintained by the Provincial Administration from £43 - £47, in church industrial schools from £45 - £43, in the Afrikaanse Christelike Vrouevereeniging schools about £24 and in

Goedemoed and Olifantshoek from £28 - £29.

Having summed up the points of difference in Part 111 of its report, the Committee proceeded in Part 1V to make its recommendations. It posed the question first: "Is the present system of industrial education to be continued or not?" The Committee then said that if it was to be continued all the schools should be treated on an equal basis in such matters as maintenance, staff salaries, equipment, rent or interest, terms of admission, periods of instruction and so on. It thought that this would result in an average cost per pupil of £50 per annum if the revenues produced were used to reduce the expenditure incurred by the Provincial Administration for improvements and for extension of operations.

The Committee then pointed out that in terms of Ordinance No. 5 of 1921 the Administrator was permitted to establish a single-teacher industrial department wherever an indigent boarding house existed. There were at this time more than 165 indigent boarding houses in all parts of the Cape Province and if the Adminstrator were to apply the terms of this ordinance literally and extensively it would be such an expensive undertaking that it would necessarily collapse under its own financial burden.

The next proposal of the Committee, if taken up at the time, would have preceded what seems to be imminent now as the next improvement to the apprenticeship scheme of training by many years, that is, the erection of hostels for apprentices, run by the churches, the State or by these bodies combined. The Committee's reasons were rather different from the current ones. Its aim was to provide suitable accommodation and efficient supervision, at a price within the reach of the apprentices when they left industrial school. (The present purpose is to provide full-time block release training for apprentices from the platteland who do not live near an apprentice school.)

The Committee was obviously not in favour of continuing the system as it then existed and it recommended:

(1) The establishment of industrial school areas and the prescription of what vocational training was to be given in each.

It pointed out that past practice had been for any interested party to establish such schools and the rules and conditions applicable had never been kept uniform. Insufficient attention had been given to the conditions and requirements of the districts or of their proximity to each other. Hence there were clashes of interest, overlapping of functions and the better aided institutions prospered at the expense of its neighbours.

(2) The sources of income of such schools must be permanent if the vocational training given was to be effective. The commercial aspect of the running of some institutions was dominant to the detriment of the training given. On the other hand the training given in schools wholly maintained by the Provincial Administration was excellent, the revenue produced satisfactory and the cost per unit reasonably low.

The Committee, then, reached the conclusion that vocational training should be undertaken by one or other State department, that all existing industrial schools should become State schools and that, where this was necessary, the buildings and equipment should be taken over at a figure to be agreed upon.

The next part of the report made a number of general comments. In brief these were to do with the absolute necessity of:

(i) drawing up proper salary scales for staff members;

(ii) prescribing the duties and functions of supervisors, matrons, teachers and instructors;

(iii) providing grants on the two-thirds basis if aided schools were to be kept in existence;

(iv) having a central store system for timber;

(v) establishing a bureau either by the Juvenile Affairs Board or by the State department concerned, for registering and advertising the names and trades of ex-students seeking employment;

(vi) creating a system of bonuses and awards to pupils in the industrial schools on the basis of work produced by them, at a fixed percentage rate, part of such payment to be kept in a savings bank until the pupil finished his contract period at the school or forfeited

it by reason of misbehaviour or expulsion;

(vii) supervisors registering the names of pupils about to leave, with the proposed bureau, assisting them in finding suitable employment and keeping in touch with them and their employers, by correspondence if necessary;

(viii) prescribing the theoretical instruction in a trade to be given in conjunction with the trade practice, by Act or Ordinance.

As a last point of the report, the Committee submitted an addendum. This referred to the sizes of class groups, which were satisfactory except in the single-teacher industrial departments at Willowmore and Montagu and in the schools at Olifantshoek and Goedemoed. It complained that the instructors were not sufficiently trained for the important work they were asked to do. It pointed out that much of the expenditure of the industrial departments attached to indigent boarding houses was borne by the Church - not a proper procedure the Committee implied - and that in the case of industrial schools managed by the Church there was a general story of heavy debt. This would inevitably mean the closing down of many schools and certainly no hope of the establishment of more industrial schools by the Church. [1]

This report is an historical document of much value because it gives a very clear picture of the state of affairs which existed in the industrial schools at that time. It shows clearly that the financing of the institutions was haphazard and inadequate, that curricula and syllabuses were unco-ordinated and, in short, the total picture was one of confusion. If this report was made known to the 1924 Durban Conference (see Chapter 1) it must have influenced the Minister in making his offer to take over the vocational schools from the Provinces.

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1. *The Special Report on Industrial Schools and Industrial Departments in the Cape Province C.P.2, 1923. pp. 155-161. Superintendent-General of Education's Report for 1922.*

2.10. The National Advisory Board for Technical Education.

Dr. Wulfsohn in his book " 'n Vergelykende Studie van Beroepsonderwys in Suid Afrika" made the statement "Gedurende die eerste dekade na die stigting van die Unie, het die daarstelling van 'n Departement van Unie-onderwys nie eintlik 'n merkbare uitwerking op die voorsiening en kontrole van beroepsonderwys gehad nie. .... die uitbreiding (was) op dié gebied tot 1923 - 24 op 'n provinsiale basis." [1]

This is true except for the fact that the National Advisory Board for Technical Education did much useful work in making syllabuses and examinations suitable for use in vocational schools available. Some reference to the work of this board has been made in section 1.2.6. of Chapter 1, particularly to some of its findings at the first meeting. In its second meeting held in Cape Town on 21st. February 1913, the Board discussed the functions and purposes of trade schools and industrial schools and obviously drew a clear line of demarcation between them. Trade schools were, it said, primarily intended to prepare boys for apprenticeship and the standard of admission should be the completion of the primary school course. The course should comprise not only the trade theory and practice of the trade to be followed but "collateral subjects like drawing and practical calculations". Industrial schools, on the other hand, should develop general "handiness" but the differentiation characteristic of the trade school, should not be attempted. The Committee foresaw the time when the industrial schools would be replaced by trade schools but they considered that in the state of primary education at that time and bearing in mind the indigent condition of a considerable section of the European population, much good could be done both to the country and to individuals by schools which did not aim at such a high standard of technical instruction as trade schools. The Committee stressed the

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1. B. Wulfsohn. " 'n Vergelykende Studie van Beroepsonderwys" Cape Town. Nasionale Boekhandel Bpk. 1959. p.40.

"In the first decade after Union, the establishment of a Union Department of Education had virtually no appreciable effect on the provision or control of vocational education. ..... The expansion in this field until 1923 - 24 was on a provincial basis."

necessity for general education and industrial training to proceed simultaneously.

The Committee also recommended that every industrial school should be open both to the children of indigents and to the children of those parents who were able and willing to pay.

It is necessary to remember that the educational authorities were not bound in any way to take the advice offered by the National Advisory Board and it was some time before fee-paying pupils were admitted to industrial schools - and this despite a further recommendation that both trade and industrial schools should be provided for children who were not indigent.

The Board also recommended that the day school syllabus in industrial schools should be of the same standard as that which applied to ordinary day schools, but in view of the particular function of the industrial school, the curriculum should be elastic and should have a distinctly technical and commercial basis. [1] The statistics for 1913 do not give details about the numbers in particular standards in any schools as they did in the earlier years (e.g. 1902)when we see that the Salesian Institute trained up to standard VI level, Uitenhage to standard V and most of the others to standard IV. What is shown for 1913 is (a) that the compulsory school limit was standard IV and that 73% of <u>all</u> white pupils continued their education beyond this standard. One can but suppose that the number who passed beyond this standard in industrial schools must have been quite low.

Reference will be made in the next two chapters to the third meeting of the Board.

In November 1915 a second board was appointed for a period not exceeding three years. It divided into two sub-committees to deal with technical and commercial examinations. These committees did very valuable work in proposing principles, courses and syllabuses. We are here concerned with the technical courses. The sub-committee for

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1. Appendix to Annual Report of Union Department of Education for the Year 1912. (U.G. 21 - 1913)

technical examinations proposed three main principles on which a national scheme of technical examinations should be based:-

(i) The insistence on a proper qualification for admission to specialised courses.

(ii) The recognition of approved courses only and not of isolated subjects.

(iii) The recognition from institutions of reports on work done during the year and the acceptance of practising teachers as examiners.

The preliminary course was standardised and was called the Preliminary Technical Certificate Course. It was a one-year full-time course taken after standard VI in a trade school or technical high school, or a two-year part-time course for pupils who had passed standard VI and were working.

The subjects of the course were civics, an official language, mathematics, drawing, science or woodwork. Five subjects were required to be passed for the award of a certificate. [1]

The number taking the examinations was very small. In 1917, as an example, 41 day school students wrote; 34 passed and 7 failed. Distinctions were not awarded in this examination. [2]

As far as the other technical examinations were concerned, there appear to have been two - the National Technical Certificate and the Advanced Technical Certificate - for part-time candidates, and the Technical Day School Certificate for full-time candidates. We are concerned here with the last named certificate. It was taken after a course lasting at least one year after the passing of the Preliminary Technical Certificate. Institutions were apparently required to provide examiners and examination papers whilst the moderators were nominated by the Union Department and acted for the whole Union. The course had to include cultural work [3] but what this was, at this stage, is not mentioned in the report. If we read the 1918 report of the Under-Secretary for Education, however, we find that the Union Department

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1. Report of the Under-Secretary for Education for 1917.(U.G.17-1919)p.58.
2. Ibid. p.61.
3. Ibid. p.58.

was approximately in the same position as the Joint Matriculation Board. "Without aiming at any interference with the curriculum it offers guidance in the arrangement of the work by approving a suitable selection of the general papers as forming a group-course." [1]

In 1918 the National Advisory Board for Technical and Commercial Education was superseded by a Advisory Committee of twenty-one members with the Secretary for Education as Chairman, the Advisor on Technical Education as Vice-Chairman, the four Directors of the Provincial Education Departments and representatives from technical colleges, Chambers of Industry and Chambers of Commerce. This committee had been busy with a further co-ordination of the system of examinations, so as to provide a complete series of examinations from the end of the primary school course. The idea of the Union Department was to have a range of technical and commercial certificates that would have the widest possible range of recognition. This Department was seeking the co-operation of the Provincial Departments to this end.[2] It was mentioned that, although entrance to the examinations was optional, an increasing number of provincial institutions were availing themselves of these examinations. Some parallel examinations were conducted by some Provinces, however. [3]

The 1920 report mentioned that the institution of a Higher Technical Day School Certificate was under consideration but the Joint Matriculation Board's conditions for matriculation exemption were proving a stumbling block. [4] This was eventually introduced and is mentioned in the 1922 Annual Report submitted by the Acting Secretary, Mr. Percy Coleman.

It can thus be seen that, although the two boards mentioned had made a valuable contribution to technical education by acting as a co-ordinating body, creating a course for the Preliminary Technical Certificate (Std.VII) and approving suggested courses and syllabuses,

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1. Report of the Under-Secretary for Education for 1918. (U.G.8-1920). p.27.
2. Report of the Secretary for Education for 1919. (UG.57-1920). p.58.
3. Ibid. p.73.
4. Report of the Secretary for Education for 1920. p.19.

things were by no means satisfactory. There was apparently no need for the various provincial authorities to have identical syllabuses, although the system of national moderators would have ensured a reasonably uniform standard. It seems also that, apart from the trade schools in some Provinces and the technical high schools attached to Natal Technical College and Pietermaritzburg Technical College, the industrial schools were not yet of a standard to enter candidates for these examinations. In point of fact some institutions entered candidates for their own examinations based on those set by the City and Guilds of London Institute. [1] They thought that the Technical Advisor, Mr. Percy Coleman, and his committees would have been better employed on advising on "the best procedure in order to build up a worthy system of Education than offer a series of stereotyped examinations". [2]

As an example of the courses offered in the technical day schools attached to technical colleges, the courses offered at the Pietermaritzburg College in 1915 are given. It will be noticed that the Matriculation Course bears little resemblance to the four previous courses and bears out what was mentioned in the 1920 report above.

Mechanical Engineering Course [3]

Preliminary
- English
- Mathematics
- Drawing
- Elementary Science
- Workshop Practice

First Year	Second Year	Third Year
Practical Mathematics	Practical Mathematics	Practical Mathematics
Geometrical Drawing	Applied Mechanics	Applied Mechanics
Elementary Science	Heat Engines	Heat Engines
Workshop Practice	Machine Construction and Drawing	Machine Construction and Drawing
	Geometry and Graphics	Workshop Practice
	Workshop Practice	

Matriculation Course
- Latin
- English
- Mathematics
- Botany
- Physical Science
- History

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1. "The Pietermaritzburg Technical College 1910-1960" op cit. p.25.
2. Ibid. p.30.
3. Ibid. p.31.

It can thus be seen that the work of the few technical high schools which existed at this period, that is to say up to 1924, had very little resemblance to that being offered in industrial schools.

In the Cape Province at this time there were no technical high schools, and this may have influenced the position quite considerably. What is abundantly clear is that each Province was free to develop its own system and that the systems in each of them were totally uncoordinated. In this respect, the take-over by the Union Department in 1925 was an extremely advantageous move, certainly as far as the industrial schools were concerned. It provided the opportunity for the examination system, the courses and the syllabuses proposed by the Advisory Committee, to be put into effect and for the gradual development of a national system of trade schools which later became full technical high schools. The table on page 86 shows the industrial schools taken over by the Union Department of Education in 1925, as well as statistics relating to other schools which had been closed. As a general rule enrolment figures are given for the second quarter of any year because this has become standard practice and enables fairer comparisons to be made. In the case of the Salesian Institute the enrolment figures from 1896 to 1898 are not recorded and in the case of the Worcester Industrial School there are seven years enrolment figures which are not given in the official statistics tables. The reason for these omissions is nowhere given. In all other cases where gaps appear in the tables, the implication is either that the school had not yet been established or that the school had closed. It can be seen then that, in 1925, the Union Department of Education took over twelve industrial schools for boys from the Cape Provincial Education Department.

2.11. The 1925 Transfer of Industrial Schools to the Union Department of Education.

In Chapter 1 it was mentioned that as from 1st April 1925 nineteen State institutions and twenty-three State aided institutions were transferred to Union control. (In addition, a large number of part-time courses were transferred.) About 3 000 full-time students from the

BOYS' INDUSTRIAL AND TRADE SCHOOLS IN THE CAPE PROVINCE 1923

SCHOOL	TRADES
ADELAIDE	CABINET-MAKING CARPENTRY BLACKSMITHING WAGON-MAKING
GOEDEMOED	AGRICULTURE
KARREEDOUW	CABINET-MAKING CARPENTRY
KNYSNA	CABINET-MAKING CARPENTRY
LADY GREY	BLACKSMITHING WAGON-MAKING
MONTAGU	BOOTMAKING
OLIFANTSHOEK	AGRICULTURE
OUDTSHOORN	CABINET-MAKING CARPENTRY BLACKSMITHING AGRICULTURE WAGON-MAKING
ROBERTSON	AGRICULTURE
SALESIAN INSTITUTE	CABINET-MAKING CARPENTRY BOOTMAKING (REPAIRS) PRINTING BOOKBINDING TAILORING
UITENHAGE	CABINET-MAKING CARPENTRY BOOTMAKING BLACKSMITHING AGRICULTURE WAGON-MAKING TAILORING
UGIE	CABINET-MAKING CARPENTRY
WILLOWMORE	MOTOR MECHANICS
WORCESTER	CABINET-MAKING CARPENTRY BOOTMAKING AGRICULTURE TAILORING

CAPE INDUSTRIAL SCHOOLS REMAINING AFTER THE 1925 TRANSFER

SCHOOL	YEAR																														
	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955
ADELAIDE : PIET RETIEF		72	81	87	100	115	115	116	118	113	116	122	123	120	121	108	95	108	122	115	112	107	109	109	112	122	112	108	111	122
KARREE DOUW	25	21	16	12	21	26	30	29	30	32	32	33	33	32	31	34	30	—												
KNYSNA : EDINBURGH	60	61	61	69	84	86	95	51	78	81	107	111	113	113	106	95	100	105	100	99	—									
OUDTSHOORN		82	81	76	79	92	100	105	117	125	59	77	83	96	101	113	108	113	104	97	218	278	340	404	418	461	418	410	378	461
UITENHAGE: DANIEL PIENAAR		85	95	114	131	129	106	106	117	119	123	121	125	123	121	116	109	106	127	130	124	122	134	129	120	111	120	122	123	111
WORCESTER : DROSTDY					62	62	63	67	65	72	92	103	101	96	93	101	99	88	94	94	83	102	102	103	117	181	117	132	172	181

(9)98

whole of the country were involved.[1] The necessary legislation was passed in the 1925 session of Parliament. Section 14 of the Provincial Subsidies Act was amended to extend the list of institutions and services included in higher education so that education removed from the Provincial Administrations, with their consent, could be administered by the Union Education Department. Section 12 of the Financial Adjustments Act was amended to confer on the Minister the power to make regulations for the control and management of the transferred institutions and to give him all the rights and liabilities previously vested in the Administrators. The amendment also provided for the retention by all transferred teachers of all rights and privileges existing at the date of transfer, and for the payment from the Provincial Teachers' Pension Funds of amounts representing their accrued retirement rights.[2]

A survey made during 1925 showed that, even in the same province, the transferred institutions were managed under a variety of ordinances and under many different forms of control. It soon became clear that time and much consideration would be necessary before a uniform system of control could be evolved. Hence in October an Interim Regulation was promulgated empowering the Minister up to the 31st March 1927,

(i) to exercise all powers lawful for the Administrator unless other regulations had been made applicable;

(ii) to assign these powers to any persons or bodies recognised or constituted for the purpose.[3]

This enabled the Union Department of Education to act in all cases under ordinances or regulations and also made it possible to delegate local control to local bodies and so relieve the Accounts Branch of unnecessarily detailed work.

An amount of £190 000 was included in the estimates presented to Parliament in 1925, for transferred vocational education (not including £44 000 for two technical colleges, the one in Cape Town and the other in Durban).[4]

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1. Union Department of Education. Annual Report for 1925. Issued in typescript on 14.9.1926. p.74.
2. Ibid. p.74.
3. Ibid. p.75.
4. Ibid. p.75.

The Secretary of the Union Department of Education reported in the 1925 Annual Report that definite progress had been made in co-ordinating and settling the conditions of control and assistance. All the trade schools and industrial schools (and there were 36 in the country) were inspected. The wide variations in conditions of admission, in costs, and in value and definiteness of curricula have already been noted in this chapter. The inspection confirmed all this. As far as the curriculum was concerned the Union Department took a definite step forward in prescribing as the goal of the courses in the trade and industrial schools the Department's Trade School Certificate. Apart from the absolute necessity of raising standards in some cases and obtaining reasonable uniformity throughout the country, the implication was that a pupil leaving one of these schools could easily adjust to the general scheme of part-time courses. Apparently the number of trade school certificates issued in 1925 was only 102.[1]

2.12. <u>The National Examinations for full-time pupils of trade and industrial schools</u>.

At this point the type of course prescribed by the Union Department of Education should be examined because it gives a fair reflection of the efforts that were being made to raise the standards and give some impetus to the work being done in these schools. The trade (or industrial) school course was a three-year one which included two examinations - the Preliminary Technical Certificate examination and the National Trades School Certificate Examination.

The Preliminary Technical Certificate course was a one-year course ex standard VI. We conclude, therefore that the entrance qualification to one of these schools was the passing of the standard VI course in a primary school. To obtain the certificate a candidate had to pass in five subjects. The first subject was compulsory and was one of the official languages English or Afrikaans on the A (or higher) level.

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1. Ibid. p.84.

The other four subjects were selected from:

(i) The second official language, Afrikaans or English, on either the A or B level.
(ii) Technical drawing.
(iii) Mathematics.
(iv) Science.
(v) Trade Theory of whatever trade the boy was learning at the school.
(vi) Civics or History or Geography.

Full-time students had to produce evidence of a satisfactory completion of a course of workshop practice. There was no external examination in this but internal tests were conducted and a course report prepared.

The National Trades School Certificate course was at least a two-year course of full-time study at a trade school (or an industrial school), the pupil having passed the Preliminary Technical Certificate Examination or a Standard VII examination.

For the engineering or building trades the examination was in two parts, a series of external written examinations and a course report on practical work performed in the school workshops. The written examination regulations required the passing of four subjects selected from :

(i) One official language, English or Afrikaans on either A or B level. The paper set was the same as that set for the National Junior Certificate. (This will be discussed later.)
(ii) Mathematics 1.
(iii) Engineering Drawing 1 or Practical Geometry.
(iv) Trade Theory 1 or any other approved subject from the National Technical Certificate, Part One, course.

The practical work was tested by periodic tests in the workshop, project work and the compilation of a course report.

There was a slight variation in the trade school course for boys in the boot and shoe manufacturing course. The examination was in three parts. Part 1 was to pass an official language on either the A or B level. Part II was to pass in the following group of subjects:-

Two subjects from

(i) Leather Manufacture
(ii) Mathematics 1.
(iii) Physics 1 or Physical Science 1 or Chemistry 1.
(iv) Practical Geometry.

Part III of the examination was, again, the successful completion of the trade practice course.

Before discussing these courses mention must be made of the National Technical Certificate course which was one designed for part-time students, mostly apprentices, who at that time, were one with Shakespeare's pupils going "unwillingly to school". They were required to pass in three subjects from :-

Aeronautics 1, Chemistry 1, Physics 1, Physical Science 1 (not to be taken with either of the preceding two subjects), Engineering Drawing or Practical Geometry, Elementary Telephony, Mathematics 1, Trade Theory 1, Elementary Building Construction.

The courses were, of course, adjusted to the needs of the apprentices who generally took a course comprising trade theory, a drawing subject, mathematics 1 and a science subject.

To return now to the trade school course, it would be easy to criticise the examination requirements. For example, the full-time pupils took the same mathematics, trade theory and drawing examinations as the part-time candidates and hence the standard of the papers had to be lowered to meet the capabilities of part-time students with far less time to give to these subjects. However, it would be pointless to do it because conditions are quite otherwise now, and in any case it must be conceded that to have introduced, at such short notice, a uniform curriculum and a national examination system was a noteworthy achievement.

2.13. The Period 1925 - 1946.

2.13.1. General

The table on page 86 shows the industrial schools, now being called trade schools which continued in existence in the Cape Province after 1925. It will be noted that several small uneconomic schools were shut down and their pupils transferred to other schools. These were the schools at Lady Grey, Montagu, Robertson, Ugie and Willowmore. Of these Lady Grey, Montagu, Ugie and Willowmore were one-teacher industrial departments and Robertson was more of an agricultural school than a trade school. [1]

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1. " 'n Vergelykende Studie van Beroepsonderwys." op cit. p.34.

Other schools were re-organised and the agricultural sections abolished. The reason, according to Adriaan Smuts, was that it was impossible to find the time to devote to such work in a trade school and it was the intention of the Union Department to open agricultural schools.[1] (see Chapter V.) Certain state-aided industrial schools (Oudtshoorn, Uitenhage and Adelaide) remained such only until 1927 when they became departmental trade schools. The Drostdy school at Worcester remained a state-aided school until 1930 when it became a departmental school and the Salesian Institute remains a subsidised school until the present day.

The building programme was expedited. Progress was more rapid in urban areas but the provision in rural areas was far less adequate. This was understandable. It took time to straighten out the legislative and administrative tangle which rural education presented. It was necessary to avoid the costly procedure of scattering indiscriminately a large number of State vocational schools over the Union and hence the Union Department had to study the problem in all its aspects.

In 1928 legislation was introduced into Parliament which eventually, on 23rd July of that year, became Act No. 29 of 1928, the Vocational Education and Special Schools Act. It was to provide for the establishment of schools for vocational education and special schools; for the control and administration of such schools; for grants-in-aid to be given to State-aided schools, and for certain other incidental matters. It gave the Minister power to establish, maintain and make grants-in-aid to schools for vocational education (we are not here concerned with the special schools for defective children). In certain respects e.g. the conditions of service and pension rights of teachers, it superseded Act No. 43 of 1925, but the important point was that the Minister could provide new schools or make the provisions of the Act apply to existing schools by giving due notice in the Gazette. He was also given power to appoint advisory committees for any vocational school. The Act dealt with the conditions of service of teachers,

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1. "The Education of Adolescents in South Africa." op cit. p.88.

gave power to the Minister to prescribe fees for schooling and for board, and power to remit these fees in part or in whole where the financial circumstances of parents or guardians warranted this.

The remarks of Dr. S.F.N. Gie in his annual report for 1928 show quite clearly how the Union Department of Education was thinking and re-acting at this time. "Education generally in South Africa, as indeed all over the world, is on the march. Fundamental questions with regard to its aims and content are being re-examined; a new philosophy of education, which has discarded the tradition that it is the chief business of schools and particularly universities to train for leisure, and which regards them as the most potent means for equipping youth for a full and active life, is being evolved; and new educational ventures, resulting in the establishment of new types of schools and the re-organisation and extension of existing institutions, have been initiated or are imminent. The largely increased facilities for vocational education, which have been directly or indirectly provided by this Department during the last few years, and the strong tendency towards introducing more so-called vocational subjects into the curricula of Provincial secondary schools, may be referred to in this connection. The work done in technical colleges and other vocational institutions under the control of the Department reveal inevitable links with the functions of the Provincial schools; ..... . Modern tendencies in education accentuate the necessity of regarding it as being closely bound up with economic, industrial and social questions ..... . The saying that where there is no vision, the people perish, is particularly applicable to departments of education and their influences on the communities which they serve. ..... The Union may be said to be passing through its Industrial Revolution, and it is particularly a function of the Department to furnish the educational facilities which our rapidly changing industrial conditions require." [1]

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1. Union Department of Education. Annual Report 1928.(UG 51-1929). p.5.

Dr. Gie's reference to increased facilities, new types of schools and new educational ventures did not, in the case of the Cape Province, mean more trade schools. These stopped constant in number. It did mean increased equipment and the financing of developments at technical colleges. Just before the 1925 take-over, the technical college in Cape Town had, by using the powers conferred in the 1922 Higher Education Act (Act No. 5), been taken under the wing of the Union Education Department from 1923. This college had been started in a small way, first as engineering classes at the South African College, and then had had added to it the railway classes at Salt River and had grown large enough by 1914 to have a full-time principal appointed by the Cape Education Department. In 1917 a separate council to run this college was appointed and then, as mentioned above, it was declared an institution for higher education and taken over by the Union Education Department. [1] *In 1927, according to the College records, a technical high school was started there. Reference has already been made in two places to this type of school but more detail will now be given because similar schools were subsequently established in the technical colleges which were established in East London on 25th June 1925, at Port Elizabeth on 12th May of the same year and at Kimberley, much later, in 1944, and these schools had an important influence, eventually, on what happened in the trade schools and on technical high schools subsequently opened (for example, that at Upington in the Gordonia district of the north western Cape Province).*

2.13.2. <u>The Technical High Schools attached to Technical Colleges</u>.

" The most significant experiment with full-time classes was the opening of a Day Continuation School for Boys in 1910. This technical high school was the first of its kind to be founded in South Africa and the Durban Technical Institute could claim to have opened up a new sphere of secondary education which has proved to be of the greatest importance to the country. For many years the type of

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1. J. Chr. Coetzee. "<u>Onderwys in Suid Afrika</u>." J.L. van Schaik. Pretoria. 1958. p.364.

pre-apprenticeship training offered in the School found little favour outside Natal. The other Provinces, and particularly the all-powerful Transvaal, preferred the Trade School." [1] This statement needs some elucidation. In the technical high schools the entrance qualification was always a pass in standard VI. The initial course, up to 1936, was a two-year course. The time-table followed something of the pattern set out below. [2] It must be remembered that this was the first attempt at such a time-table.

Subject	1st Year	2nd Year
Humanities (including 1 hour Bible Study per week)	8 hours	6 hours
Mathematics	8 hours	8 hours
Science	3 hours	5 hours
Art	2 hours	1 hour
Mechanical Drawing	4 hours	5 hours
Manual Training (Woodwork)	5 hours	5 hours

Subsequently the time given to workshop practice was increased and included metalwork. Yet later, electrical work was introduced as an alternative to woodwork or fitting and turning. But the important point to note is the great stress laid on the general, formative education. Further to illustrate the difference between this type of course and that given in the trade schools even as late as 1941-2, Inspector R.D. Bingham of the Department of Higher Education who worked at the Drostdy Trade School from 1941 - 1945 as an instructor in plumbing, gave the following information. The week was, as in the technical high schools, a 36-hour one but of this time 18-20 hours were spent in the workshops learning, at that time, one of the following trades - Cooperage, Tailoring, Cabinet Making or Plumbing and Sheet-metalwork. Trade theory was taught on Saturday mornings from 8 a.m. till 12 noon. There were A and B groups which spent alternate days in classrooms or workshops. The course was the three-year course (previously described) for the Preliminary Technical Certificate and the Trades School Certificate. Many boys completed the course in two years and spent the third year full-time in the workshops until placed in suitable employment. Some volunteered to do extra study for the National Technical Certificate, Part Two.

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1. "Natal Technical College, 1907 - 1957." op cit. pp. 47 and 48.
2. Ibid. p.48.

The boys in technical high schools in Natal and the Cape Province did not work for the Trades School Certificate. They did write the examinations for the Preliminary Technical Certificate (there was no alternative certificate) but in the standard VIII year they prepared for the Junior Technical Certificate. This was a six subject certificate, the subjects being selected as follows:-

1. An official language, English or Afrikaans on the A level. (Compulsory)
2. Mathematics 1.
3. Physics 1.
4. Chemistry 1.
5. Physical Science 1. (not to be taken with 3 or 4 above).
6. Geology 1.
7. Practical Geometry or Engineering Drawing.

Three from this group.

Two from :-
- The second official language, English or Afrikaans A or B.
- French or German or Xosa or Zulu.
- Aeronautics 1.
- Bookkeeping and Commercial Arithmetic, or Geography or History.
- Trade Theory 1.
- Any other approved subject from the National Technical Certificate, Part One, course not taken.

This course was designed to give part-time students a reasonably wide choice of subjects. The technical high school pupils used to take Afrikaans A or B, English A or B (depending on the mother tongue), Mathematics, Physics, Chemistry, Engineering Drawing or Practical Geometry, and a trade theory subject. The pupils who proposed specialising in building trades would take Elementary Building Construction in place of Engineering Drawing or a trade theory.

Again, this examination course could be criticised but in the light of what has happened in subsequent revisions of courses, this is not warranted. The main complaint was that the papers were set to the standards that could be attained by part-time students and hence were not sufficiently demanding for full-time pupils. It was also the case that bilingualism was not a requirement unless prescribed by employers.

There was a senior certificate examination but there was little demand for this in technical high schools until about 1936. It was only in July 1931 and January 1932 that the Union Education Department requested recognition of the National Senior Certificate for matriculation exemption purposes. This was agreed to on conditions

(i) that the Joint Matriculation Board exercised a certain measure of control as it did for the Transvaal and Cape Province school leaving certificates;

(ii) that the results of the National Senior Certificate were submitted to the Joint Matriculation Board before publication;

(iii) that full-time candidates wrote and passed six subjects, selected according to Joint Matriculation Board groupings, at one and the same examination;

(iv) that part-time candidates who produced proof of being in employment and of being bona fide students, were allowed to write the examination in two parts, at least three subjects in the first examination and the balance in a subsequent examination. [1]

The National Senior Certificate examination was a six subject one for obtaining the certificate but subject successes could be accumulated. The groupings of subjects were:-

(i) An Official language, English or Afrikaans on the A level.
(ii) Mathematics III or Mathematics Senior.
(iii) Physics III or Chemistry III or Physical Science III or Geology II.
(iv) Three subjects from
- The second official language on the A or B level.
- French, German, Xosa or Zulu.
- Areonautics III.
- Applied Mechanics II.
- Heat Engines II
- Machine Construction and Drawing II or Building Construction II.
- Motor Car Construction III.
- Bookkeeping and Commercial Arithmetic, or Economics, or Geography or History.
- Any approved National Technical Certificate III subject not taken.

Some elucidation is required here because no mention has been made yet of the National Technical Certificates other than the Preliminary and the Part One certificates.

At this time, and chiefly for the sake of part-time students, particularly apprentices, there were two other technical examinations the part two (internally examined but departmentally moderated) and the part three examination, which was an external examination and

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1. "Onderwys in Suid Afrika." op cit. p.371.

which led to the award of the National Technical Certificate, Part Three, on the passing of three subjects. The grouping was :-

Group 1. One subject from
Aeronautics 111
Applied Mechanics 11
Electrotechnics 11
Machine Construction and Drawing 11
Motor Car Construction 111
Telephony 11

Group 11. Two subjects from :-
Chemistry 111
Heat Engines 11
Mathematics 111
Industrial Metallurgy or Foundry Metallurgy
Physics 111
Physical Science 111 (not to be taken with either Physics 111 or Chemistry 111.)
Radio Communication 1
Telegraphy 11
Any subject from Group 1 not taken.

For candidates from the building trades the subjects were somewhat different.

Group 1. One subject from
Applied Mechanics 11
Bricklaying 111
Building Construction 11
Carpentry and Joinery 111 or Wood Machining 111
Painting and Decorating 111
Masonry 111
Sanitation 11

Group 11. Two subjects from
Costing and Estimating 1
Drawing for Plumbers 11
Mathematics 111
Physics 111
Chemistry 111
Physical Science 111 (not to be taken with Physics 111 or Chemistry 111.)
Any subject from Group 1 not already taken.

Subject successes in these examinations (National Technical Certificate 11 and 111) could be accumulated. Technical high school boys followed the National Technical Certificate Part Two course from 1937 onwards but added to it both the official languages with the object of preparing for the National Senior Certificate (Matriculation Exemption) examination in the following year. Usually they found the part two examinations very straightforward because, for obvious reasons they, having more time at their disposal than part-time students, were taken well beyond the scope of the part two syllabuses. In mathematics,

for example, geometry (Euclidian) formed no part of the mathematics syllabus but they had to prepare for the geometry paper of the Senior Certificate examination. The boys who did not pass the Senior Certificate (Matriculation Exemption) examination often qualified for the National Senior Certificate or, almost without exception, for the National Technical Certificate, Part Three.

This fact had a great influence on the trade schools because, quite rightly, they reasoned that their abler students should be allowed to stop longer at school and follow courses leading to these same certificates. Professor Botha had recognised this fact, too, for in his 1935 report he wrote "Technical Education should be made available for all who desire it and can profit by it ..... . While it may be argued that in the technical schools directly controlled by the Department such training may be obtained at very little cost to the individual, the fact remains that there are two weaknesses in the present provision; the training does not go far enough and the choice of trades offered is too limited." [1] There was, of course, a reason for this. Dr. Botha supplied it in his previous report. "The revival in industry which followed the depression of a few years ago has caused a large increase in the number of applications ..... and shown the available accommodation to be hopelessly inadequate. The existing schools should be extended and new ones established if we wish to admit all applicants and in this way keep pace with the industrial development of the country." [2] And again in the same report he wrote. "Buildings and personnel are two essential requirements in all effective education. What immediately strikes the visitor to the majority of our schools is the lamentable - inadequate would be far too weak a term here - condition of the buildings in which the pupils have to spend their time, day and night. The development of vocational training did not take place by degrees, and it is thus conceivable that it was necessary in the beginning to utilise whatever accommodation was

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1. Union Department of Education. Report for 1935. op cit. p.10.
2. Union Department of Education. Report for 1933 & 1934. op cit. p.10.

available. Military quarters and even stables had to serve as classrooms and hostels and are still so doing. It is impossible, however, to give thorough instruction and to develop the artistic sense in children under such conditions. ..... The Department is assailed on all sides by reasonable requests for new schools, but the rate of development is determined by the ability of the Department of Public Works to satisfy the many departmental needs. The inevitable result is that the establishment of new schools often has to remain in abeyance and the Department has to concentrate on the improvement and extension of existing schools instead." [1]

So, to return to the technical high schools. They were, in most cases, in far better buildings, these having been of much more recent construction. They had another advantage. The teachers (they were called lecturers) employed by the technical colleges were usually better qualified, if for no other reason than that they had to teach more advanced work than was offered in the trade schools. Many were graduates and the salary scales paid tc the staffs of technical colleges were higher than those paid to the staffs in trade schools. In point of fact the trade schools staffs were worse paid than the teachers in provincial schools. This is made clear in Professor Botha's last mentioned report. [2] *It was many years before workshop instructors were paid on scales corresponding to other teachers. I can remember being one of the deputation which argued their case (and that of other teachers) before the then Secretary, Advocate A.A. Roberts, in 1945 and new salary scales were introduced more or less equivalent to those in provincial schools from the beginning of 1946.* [3] *This fact of lower salaries, of course, hampered recruitment of teachers for the trade schools.*

The technical high schools never suffered from the stigma of indigency. That is not to say they were favourably regarded by the provincial authorities - they were definitely not. They were regarded as schools for the less intelligent, although in many cases this was

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1. *Union Department of Education. Report for the years 1933 & 1934. p.11.*
2. *Ibid. p.11.*
3. *Union Department of Education. Report for 1946. p.15.*

not the case. This was proved by the fact that they always had waiting lists of pupils who wished to take technical courses. Being departments only of technical colleges, the number who could be enrolled was limited because of the growing demand for accommodation for day classes for apprentices.

There was another disadvantage, too, from which the technical high schools suffered. The technical colleges were autonomous, state-subsidised institutions. There have been, over the years, various forms of subsidy. One will suffice as an example. On fee income the Government gave £3 for £1 for the first £1 000, £2 for £1 for the next £6 000, £1 for £1 on the next £63 000 and 10s. for £1 on the balance. On other recurrent revenue £3 for £1 on the first £2 000 and £1 for £1 on the balance. On non-recurrent revenue (i.e. amounts less than £500) £1 for £1. [1] The colleges usually were short of money and hence it was difficult to keep equipment up-to-date, particularly workshop machinery, which is very expensive. Nevertheless, at any rate up to the outbreak of the 1939-45 war, the technical high schools set a good standard and the trade schools gradually raised their standards until in 1944 the term technical high school was substituted for trade school.[2]

In the period that has been considered there were only three technical high schools in the Cape Province. The table on page 101 shows when they were founded and the enrolments during this period. It can be seen that they were small schools and this pattern of enrolments persisted until well into the 1960's, as subsequent figures on pages 102 and 103 show.

2.14. The Period 1946 - 1955.

The significance of the dates themselves is that the first is the year immediately following the end of the 1939 - 45 war and the second is the date of the passing of the Vocational Education Act. As such they demarcate a period which is important in the history of vocational

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1. Report of the Commission on Technical and Vocational Education. op cit. p.273.
2. Union Education Department. Report for years 1941-1945. p.5.

TECHNICAL HIGH SCHOOL ENROLMENTS

TECHNICAL COLLEGE	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946
CAPE	37	52	40	43	46	45	43	36	40	53	68	87	71	56	48	71	116	128	164	212
EAST LONDON						29	44	66	85	109	118	154	185	192	155	151	184	217	240	251
PORT ELIZABETH										15	18	43	57	61	59	88	124	149	152	156

TECHNICAL HIGH SCHOOL ENROLMENTS (CONTINUED)

TECHNICAL COLLEGE	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
CAPE	71	88	77	62	77	91	131	137	137	166	190	187	162	255	271	BECAME SEPARATE SCHOOL—								
EAST LONDON	165	152	133	160	161	167	203	241	254	269	263	276	295	452	495	541	551	570	591	619	649	600	562	541
PORT ELIZABETH	138	155	134	133	181	228	299	289	231	178	193	218	222	229	231	BECAME SEPARATE SCHOOL—								
NORTHERN CAPE		27	36	57	79	115	135	175	164	156	246	275	320	395	413	446	436	463	518	538	518	526	575	544

TECHNICAL HIGH SCHOOLS

SCHOOL	YEAR														
	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
ADELAIDE : PIET RETIEF	146	140	131	143	132	123	148	144	155	146	167	153	161	198	203
GEORGE : P.W. BOTHA													73	168	251
PINELANDS : OUDE MOLEN	—	—	—	—	—	—	274	461	504	549	581	563	572	589	601
OUDTSHOORN	535	592	631	632	652	683	730	749	654	650	639	675	632	623	635
PORT ELIZABETH	—	—	—	—	—	—	—	408	561	590	576	585	568	570	583
UITENHAGE : DANIEL PIENAAR	220	240	254	273	263	297	309	272	294	346	349	386	384	417	441
UPINGTON									99	171	179	209	215	226	244
WORCESTER : DROSTDY	232	253	280	289	300	343	368	381	373	388	382	479	428	466	500

education in general. The war had stimulated industrial expansion in South Africa and drawn the attention of industrialists as well as educationists to the fact that vocational education in South Africa was far from satisfactory. The Union Education Department had itself taken the first step by requesting the setting up of a commission to investigate and report on vocational education in South Africa. The Officer Administering the Government, His Excellency the Right Honourable N.J. de Wet, appointed a commission consisting of Dr. F.J. de Villiers (Chairman), Mr. L.H.L.Bodham, Mr. C.H. Crompton, Professor John Orr and Mr. A. Linton to investigate and report on technical and vocational education in the Union in general and more especially on :-

(1) The most suitable methods of training for industry, having regard to the role of apprenticeship and leadership in such training, and the providing of facilities therefor.

(2) (a) Whether and to what extent greater provision should be made than at present for instruction of a vocational character in the curriculum of primary and secondary schools which provide educational facilities of a general character.

(b) The scope of the vocational and technical instruction which should be given in educational institutions established for that specific purpose.

(3) The parts that should be played by the Union and Provincial Education Departments respectively in the matter of vocational and technical education, having regard to -

(a) the functions on the whole of technical colleges as they have developed as institutions of higher education under Act No.30 of 1923;

(b) the relationship between the work of the vocational schools of the Union Education Department and of the technical colleges in so far as they fall within the field of secondary education on the one hand and the ordinary secondary education activities of the Provinces on the other;

(c) the relationship between the work done at the vocational schools of the Union Education Department and the work done at technical

colleges in so far as it is of the same general character;

(d) the desirability of co-ordinating the various activities mentioned.

(4) Any financial implications arising from the above. [1]

The Commission took this task very seriously and went broadly and deeply into the matter and issued a 310-page report, perhaps one of the most comprehensive education reports that has been produced. It was not, at that time, appreciated by all the educational authorities but, in the light of recent and planned innovations, its worth is becoming more recognised. Consider, for example, its recommendation that there should be a three-year, post-primary, differentiated education for all pupils between the ages of 12 and 15 in order to give effective vocational guidance to pupils. [2] This is, of course, the junior high school course which is being so seriously considered at this very time.

There were three other main recommendations :-

(i) The creation by Act of Parliament of a National Education Board to co-ordinate the various educational services. [3]

(ii) The extension and improvement of vocational education. [4]

(iii) The provision of free vocational education, full-time and part-time, up to the age of 18 or senior certificate examination. [5]

It was mentioned in Chapter 1 that the Committee of Heads of Education Departments submitted a proposal similar to (i) above but the Cabinet rejected this.

As far as proposal (ii) was concerned Advocate Roberts, the Secretary for the Department of Education, Arts and Science (previously, until 1948, called the Union Education Department), devoted Chapter 11 of his 1948 report to analysing the expenditure on Education and saying in the last paragraph of that chapter - "From the evidence led above it seems reasonable to conclude that to reduce expenditure on education would be deleterious not only to the moral and intellectual well-being

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1. Report of the Commission on Technical and Vocational Education. op cit. p.(ii)
2. Ibid. p.279.
3. Ibid. p.283.
4. Ibid. Chaps. V11, V111, 1X, X, X1, X11, X111.
5. Ibid. p.278.

of the State but also to our future economic prosperity. We are definitely not overspending on education. Indeed, we have not yet learnt to appreciate the importance of education in an industrialised society where human skill is of paramount importance." [1] He had shown earlier that the expenditure in 1945 and 1946 had been respectively 3.076% and 3.394% of the national income. [2] And again on page 10 of the same report he wrote "The technical colleges in the past year have had to contend with three difficulties; lack of funds for the modernisation, replacement of equipment and development; lack of accommodation; and lack of properly qualified staff, especially for specialised technical subjects".

This last lack - that of properly qualified staff - was a feature which developed during and immediately after the war. It was said in the previous section of this chapter that the technical high school pupils had been trained by better qualified teachers than those generally available in the then-called trade schools. Now the position had changed. Rapidly expanding industry prevented the colleges from recruiting and retaining specialist technical staff. In fact the Natal Technical College admitted to the teaching staff (as distinct from the workshop instructing staff) the first man with an Advanced Technical Certificate, Part Two in 1941. Some further attention will be given to this question of teaching staff, because it was, for a long time, a serious problem, particularly in the departmental technical high schools.

The 1948 report of the Department of Education, Arts and Science states that there were ten technical high schools (in the country) and this number referred only to departmental schools, not to those attached to technical colleges. These were all full; there was increasing demand for places and the placement of pupils was very satisfactory. [3]

The report refers to the uneconomic distribution of the schools over the Union entailing additional expense for pupils travelling

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1. Department of Education, Arts & Science. Report for 1948. p.7.
2. Ibid. p.5.
3. Ibid. p.12.

long distances to and from school on admission and for holiday purposes. It also left large areas like the North Western Cape and Natal without proper provision for vocational training. [1]

Apparently machinery and materials were becoming easier to obtain after the war and important improvements in respect of equipment and tools had been effected. Some machinery and tools had been transferred from the Central Organisation for Technical Training, an emergency training scheme for srtisans created during the war, and this had helped also to alleviate the position in the schools. [2]

In this year, also, a new technical high school was started in Kimberley by the Northern Cape Technical College. It followed the pattern of the other technical high schools associated with technical colleges. It started in very limited accommodation and, as workshops, hired a boiler house at the de Beer's Mine. Naturally the numbers had to be restricted until the new college was opened in 1952. From that time onwards the school has grown until again, in the last few years, enrolment has had to be restricted until a new school has been finished. This will be discussed later in this chapter.

The 1949 report of the Department of Education, Arts and Science, now under the new secretary Mr. H.S. van der Walt, B.A., B.Ed., mentions that import restrictions and the financial situation hampered all efforts to make up the leeway as regards machinery and equipment which would normally have been periodically replaced as they wore out. [3]

The report also mentioned the planning of new technical schools in rural areas as suggested by the de Villiers Report. Apart from the fact that the rural boys were at a disadvantage in respect of opportunities for technical training, there was a growing need for more and better trained artisans in these areas because of the growing use of machinery in agriculture. Conviction was at last growing, that modern technical training being a costly business, in order to keep

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1. Ibid. p.13.
2. Ibid. p.13.
3. Department of Education, Arts & Science. 1949 report. p.15.

unit costs as low as possible, these new schools should be planned for 500-600 boys. This might also involve the expansion of certain existing schools. [1] This question of providing suitable and adequate buildings was described by the Secretary of the Department of Education, Arts and Science as one of the greatest obstacles impeding the successful functioning of departmental schools. In his report for 1950 Mr. van der Walt mentioned that a committee appointed in 1939 estimated the cost of the new buildings required at £750 000. By 1946 this amount had grown to £2 500 000 and by 1950 it had reached £3 000 000. Thus those eleven years had seen a steady and serious deterioration of the building position. He rightly stated that if suitable and adequate buildings are not available, not only does the efficiency of the work suffer but the true cost per unit rises disproportionately. "Efficiently planned and constructed school buildings exercise a decisive influence on the health, happiness and safety of pupils as well as on the efficiency of the instruction they receive. The economy of time and effort with which the teaching staff can carry out their duties is largely determined by the suitability and convenience of the buildings available." [2]

He went on to point out that his department was faced with a number of special difficulties in this matter of providing buildings. The first reason can be deduced from the early portions of this chapter (i.e.) the number of buildings which were inherited from other departments and which were never planned or designed as educational institutions. The next reason was the fact that his department had to serve the whole Union. Another reason was the number of widely differing categories of schools which had to be provided and the last reason was the necessarily expensive nature of much of the education provided.

The first table on page 109 shows, for a number of years the

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1. Ibid. p.16.
2. Department of Education, Arts & Science. 1950 Report. p.6.

FUNDS ASKED FOR AND GRANTED FOR DEPARTMENTAL SCHOOL BUILDINGS

YEAR	TOTAL VALUE OF NEW BUILDINGS APPLIED FOR	TOTAL VALUE OF NEW BUILDINGS APPROVED	AMOUNT VOTED FOR CURRENT FINANCIAL YEAR	PERCENTAGE OF APPLICATIONS APPROVED
	£	£	£	
1940-41	307 550	137 900	13 900	44·8
1941-42	—	8 200	8 200	—
1942-43	305 250	35 500	11 500	11·6
1943-44	578 680	99 050	40 100	7·1
1944-45	596 850	221 250	35 100	37·1
1945-46	511 280	87 900	25 500	17·1
1946-47	704 460	166 150	39 500	23·6
1947-48	808 261	111 000	27 000	13·7
1948-49	505 455	70 700	24 200	14·0
1949-50	1 146 685	210 200	7 100	18·3
1950-51	1 506 530	26 500	—	1·8
TOTAL	6 971 001	1 174 350	—	16·8

FUNDS ASKED FOR AND GRANTED FOR UNIVERSITIES AND TECHNICAL COLLEGES

YEAR	TOTAL AMOUNT ASKED FOR	AMOUNT VOTED	PERCENTAGE
	£	£	
1946-47	285 510	282 510	98·9
1947-48	565 535	480 500	85·0
1948-49	491 105	399 000	81·2
1949-50	688 930	556 430	80·8
1950-51	608 650	432 275	71·0
1951-52	625 230	622 100	99·6
TOTAL	3 264 960	2 772 815	84·9

amounts requested on the Public Works Department's vote and the amounts granted for departmental schools. It will be seen that this contrasts very sharply with the funds voted as building loans to Universities and Technical Colleges as shown in table 11. [1] It appears that the Secretary had good grounds for his remarks about the obstacles in the way of providing suitable departmental schools.

The new school at Pietersburg in the Northern Transvaal - a combined technical and commercial high school - opened in this year (1950) in an old air force camp using converted buildings and it was only four years ago that the two schools, large schools of about 750 pupils each, separated and went into new buildings. The reason for this was that the South African Air Force required the old camp and air strips to be returned to it.

Exactly the same thing happened at Oudtshoorn. The old Royal Air Force Air School, Number 45, was taken over and some of the military buildings converted into hostels, some into staff houses, some into classrooms and some into workshops and at the beginning of 1946 the school moved from its old site in George Street to this new site. At the same time the school at Knysna was closed and the pupils transferred to Oudtshoorn. This is reflected in the enrolment figures for 1946 in the table on page 86. The new school at Oudtshoorn is now being planned - again because the South African Defence Force requires the present site returned. The only virtue that can be seen in these situations (and the same thing happened at Kroonstad in the Orange Free State) is that as more accommodation was required to cope with the increasing demand for technical high school places, it was simply a question of converting army huts into the kind of accommodation required. This was reasonably cheap and quick. The result was that all three of these schools grew to be large schools long before any others. In 1951 the Oudtshoorn Technical High School was the largest technical school in the Union. [2]

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1. Ibid. p.7.
2. Department of Education, Arts & Science, 1951 report. p.23.

It must not be thought that the schools were entirely neglected. It was in 1950 that a new hostel was added to the Adelaide (Piet Retief) Technical High School and tenders were accepted for the erection of a new hostel and workshops at Drostdy Technical High School, Worcester for £60 000. [1.2.] By the time the 1952 report had been written (16th May 1953) this hostel and a residence for the Principal had been finished and the first of the new series of workshops, that to house the motor mechanics section, had been finished. [3] This same report mentions that expansion at Adelaide had practically come to a halt through lack of space - a matter which will be referred to again later - and at Uitenhage there were great possibilities for expansion but although more ground had been transferred from the municipality, the site was very restricted and more ground would have to be purchased. New classrooms had been added and the school building team had started on an ambitous project of building three new workshops of saw-tooth construction. It will be necessary too, to refer again to this school. [4]

Permission was given in 1952 to the Oudtshoorn Technical High School to offer a senior certificate course. Apart from the technical high schools forming part of the technical colleges, this was the first of the old trade schools in the Cape to offer this course. [5]

No specific mention has been made in this chapter of the changes made in trades at the various schools, but it is quite obvious that some trades like wagon building, wagon trimming and saddlery were no longer in demand and other trades were coming to the fore. For example Uitenhage started a fitting and turning section in 1953 in one of the new shops that the pupils had built. Adelaide started a bricklaying and plastering course in 1951 and electrical workshops were opened in most of the schools in place of the out-of-date courses mentioned and trades which were being taken over by non-Europeans - upholstery and shoe repair. Another trade that was disappearing was tailoring because

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1. 1950 Report. Op cit. p.17.
2. 1951 Report. Op cit. p.5.
3. Department of Education, Arts & Science, 1952 report. p.19.
4. Ibid. p.19.
5. Ibid. p.19.

of the great increase in production of factory made clothes. The metal industries were developing all over the country and welding, heavy metalwork, panel beating and spray painting were being introduced as the demand warranted it.

To return to the 1951 report, reference must be made to an experiment which was tried in the technical high schools and was first mentioned in this report. At this time the annual intake of apprentices was between 7 000 and 8 000 of whom only 1 600 to 2 000 underwent any sort of pre-apprenticeship training. [1] To combat this it was proposed to start one-year intensive pre-apprenticeship courses to try and increase the 1 600 - 2 000 youths to 4 000 per year. Admission was to be limited to youths who were 15 years or more, of age and had passed at least standard VI. At least 20 hours per week (800 hours per year) would be spent in the workshop, six hours per week minimum to trade theory, technical drawing and mathematics, and the remaining eight to ten hours per week to the general school subjects. The Department of Labour was prepared to recognise this as equivalent to one year of apprenticeship. [2]

This course met with much criticism but was tested out during 1952 by two technical high schools in Bloemfontein and Pietersburg, with considerable success. [3] It was decided, in the light of the experience gained, to modify the courses in 1953 and offer them at Middelburg (Transvaal), Potchefstroom, Pietersburg, Bloemfontein, Kroonstad, Uitenhage and Oudtshoorn. For those pupils who did not comply with the requirements for the one-year course, a two-year course was offered. [4]

It is not believed that this type of course lasted long. It was certainly not introduced in the technical colleges, where such intensive training, even as a temporary expedient, would have been regarded as a retrograde educational step.

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1. Department of Education, Arts & Science, 1951 report. Op cit. p.9.
2. Ibid. p.9.
3. Department of Education, Arts & Science, 1952 report. Op cit. p.19.
4. Ibid. p.19.

Another development in 1953 which caused accommodation problems in the technical high schools was the enrolment of standard VI pupils in high schools. It was necessary to appoint extra instructors at many technical high schools and it was reported that, except for Kroonstad and Uitenhage, all the technical high schools were over-full.[1] In 1955 provision was being made at Oudtshoorn for 560 pupils by a further conversion of the old Air Force buildings. At Uitenhage the school building team started with the erection of a new block of three workshops and the old woodwork shop was converted into a hostel.[2]

The most important educational step which occurred in 1955 was examined to some extent in Chapter 1. This was the passing of the Vocational Education Act, Number 70 of 1955. According to the Secretary of the Department of Education, Arts and Science this was "The most important milestone in the history of vocational education since this type of education was taken over by the Central Government in the early twenties".[3] There were, at the time, serious doubts expressed as to the wisdom of this step. The technical colleges, for example, doubted whether the officials at the Department had sufficient knowledge of the detailed working of a technical college, to control estimating, the allocation of funds, the appointment of staff and these types of administrative functions. This, as shown by subsequent events, proved to be the case, despite the fact that several inspectors of education were appointed from technical colleges. The real difficulties did not lie in the realm of teaching but in the administrative side of highly complicated institutions. The administrative staff at the Department had previously had to do with full-time schools - technical high schools, a few commercial high schools, some housecraft schools, industrial schools, reformatories - and in addition some continuation classes and schools for adult artisan training. With higher education as such they had had nothing to do and were always at a loss. It must be

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1. Department of Education, Arts & Science. 1953-54 report. p.19.
2. Department of Education, Arts & Science. 1955 report. op cit. p.17.
3. Ibid. p.7.

stated immediately that they did not seriously interfere with the administration of the larger technical colleges which were budgeted for on quite a different basis from the smaller colleges. These larger institutions were the colleges at Pretoria, Johannesburg, Durban and Cape Town. With regard to the remainder they virtually took control. There again the financial help given to these colleges at Port Elizabeth, East London, Pietermaritzburg, Kimberley, Bloemfontein and the various branches of the Witwatersrand Technical College, was generous and from this point of view there is nothing to complain about. In fact, in the case of the technical high and commercial high schools there was much to be thankful for. For the first time in many years new equipment and machinery was provided which the colleges, because of their inadequate funds, had been unable to acquire. The problems lay more in the field of adult education, art and the general cultural activities which, in general, were outside the experience of the administrative staff. However these problems have now to a great extent been overcome and the five large technical colleges (Cape, Natal, Port Elizabeth, Witwatersrand and Pretoria) together with the new one at Van der Byl Park (Vaal Driehoek) have become colleges for advanced technical education and have virtually regained their status as autonomous institutions, if not in name, in practice.

It is supposed that one of the main purposes of the Act was to separate from the technical colleges the full-time schools. Certainly in many instances this has been done. In Cape Town, for example, the technical high school was separated and placed in a new building at Pinelands and is now called the Oude Molen Technical High School. It is developing into a very large school. It was built for 450 pupils but now houses 600 and is being extended to accommodate 750. At Port Elizabeth a new technical high school for 600 was built and opened in 1962 and is full. Schools are being planned for the other colleges at East London and Kimberley and these will be discussed later in this chapter. One of the reasons for this separation of these schools was the decision to make all full-time vocational education free up to

standard X level. This included the provision of free books, and one can understand that "From the point of view of government policy and effective control of the utilisation of public monies some change in the form of control was therefore essential". [1] It is also true that all vocational education under the Department, from the lowest to the highest level, was now governed by one Act. [2]

The take-over of the technical colleges did not all occur on one date. It was spread over a number of years, one of the reasons being that it was possible for independent technical colleges to borrow money and erect new buildings much more quickly than the State, working through the Department of Public Works, was able to do. This policy was followed in the case of the two technical high schools mentioned above and in several other centres outside the Cape Province. In the Cape Province, as an example, the Worcester branch of the Cape Technical College was taken over on the 1st. April 1957 and the Northern Cape Technical College on the 1st. October 1957. East London Technical College was taken over on 1st. July 1959 and the Port Elizabeth Technical College on 1st. October 1963. These are the institutions with which this chapter is most concerned. The technical high school at Newton Park, on its completion on 1st. November 1962, was transferred from the control of the Port Elizabeth Technical College. On the 1st. April 1961, the Oude Molen Technical High School had been transferred from the Cape Technical College to Central Government control.

Thus it was that from 1st. November 1962, there were eight technical high schools in the Cape Province, apart from the subsidised institution, the Salesian Institute, in Cape Town. They were Adelaide (Piet Retief), the Oude Molen Technical High School, Cape Town, the East London Technical High School, still housed in the technical college, the Northern Cape Technical High School, still housed in the technical college, Oudtshoorn Technical High School, still in the old Air Force Training School, Newton Park Technical High School in Port Elizabeth, Uitenhage Technical High School, still on its original 1895 site, though somewhat enlarged, and the Drostdy Technical High School at Worcester.

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1. Ibid. p.9.
2. Ibid. p.7.

2.15. The Period 1955 - 1968.

2.15.1. Buildings

The period named was one of consolidation and, to some extent, expansion. As far as buildings were concerned only two technical high schools were built, the first, actually a combined technical and commercial high school, was built at Upington in the Gordonia district of the North Western Cape Province. This supplied a long-felt need and its necessity had been mentioned by Advocate A.A. Roberts, the Secretary for the Department of Education, Arts and Science, in 1948, when he focussed attention on the uneconomic distribution of technical high schools over the Union.[1] His successor Mr. H.S. v.d. Walt had cause to refer to the problem of technical high schools in rural areas in both his 1949[2] and 1951[3] reports. The combined school was opened at the beginning of 1964 and by this time it was already apparent that it could not cope for long with the vocational needs of this district.[4] It was not immediately put back on the estimates for enlargement but in 1967 it was decided to build a new commercial high school near the existing school to accommodate 300 pupils immediately and to be capable of extension to take 450; and to enlarge the existing school and use it entirely as a technical high school for 450 boys. This is an illustration of how quickly industry expands and with it its demand for skilled labour. It is to be supposed that the tremendous deposit of iron ore in this area had been largely unsuspected when plans were first envisaged for vocational schools in this area.

The second technical high school was built at George and actually only opened at the beginning of 1968. It was built for 350 pupils of whom 240 were to be in hostels. The difficulty experienced with all planning of schools is this, that the survey of the district and the initiating of the scheme takes place long before architects are appointed. This has been very true until the last two years when

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1. Department of Education, Arts & Science, 1948 report. op cit. p.13.
2. Department of Education, Arts & Science, 1949 report. op cit. p.15.
3. Department of Education, Arts & Science, 1951 report. op cit. p.23.
4. Letter from Minister de Klerk to Administrator of the Cape Province. 25.10.67.

procedures have speeded up somewhat because of less financial stringency. By the time the school is erected, it is found to be already too small for its future needs. This was definitely so in George. When a technical high school opens it is usual to take in only standard VI boys. In the case of George, the school took in 59 standard VI boys and 15 standard VII boys. This enables the necessary vocational guidance to be given after a year's observance of the abilities of the boys in the basic workshop, in which they make an acquaintance with a number of trades, as well as in the classrooms. In 1969 there were 168 boys in the school and in 1970, with only a small standard IX class, there are 250 boys. It is thus already obvious that the school will be too small in a very few years and planning has already begun to enlarge it to take eventually 600 boys. (The further expansion of this school will be discussed in Chapter III.)

2.15.2. Teachers

2.15.2(1). General *At various points in this chapter reference has been made to the inadequacy or the insufficiency or both, of instructors for the workshops in industrial and trade schools. It was mentioned that the Cape Education Department started a scheme for training such instructors at Uitenhage but, because of the take-over by the Union Department, this scheme apparently did not last long.*

Mr George Hofmeyr in his 1912 report of the Union Education Department referred to the quality of the teaching as not being very satisfactory and said that the National Advisory Board for Technical Education considered it advisable -

(i) that the instructors be trained on a uniform scheme throughout the Union:

(ii) that the Directors of Education for the four provinces be requested to submit for the consideration of the National Advisory Board a common scheme for the whole of the Union:

(iii) that a uniform scale of salaries for teachers in trade and industrial schools be established throughout the Union, and that the scale be not lower than that applicable in the case of teachers in

ordinary schools. [1]

It was many years before anything like this was attempted. In the early days of technical education it was very difficult to find instructors from industry who were capable of communicating adequately with their pupils. Of course it has been shown that a serious defect of technical education for many years was the low standard of general education of the pupils. There was also the factor that the instruction given was often outmoded due to poor financing and inefficient equipment. In addition the teaching was often poor. [2]

From about 1915 onwards came the realisation that too great a gulf existed between daily experiences of pupils and their vocational activities. It became apparent that there was a need for better education leading to an understanding of the laws and principles underlying sound practice and that it was necessary to educate "the whole boy". [3]

When Mr Percy Coleman, M.A., was appointed as technical adviser to the Union Education Department in April 1914, one of his first tasks was to investigate the position of technical education. He reported to the National Advisory Board for Technical Education. In its report the Board states "Consideration has been given to the qualification of teachers in technical subjects, and approval has been expressed of schemes of training for teachers of domestic science, commerce, manual training, art and music, each involving a two years' course in a suitable training college. The Board has also indicated the conditions on which technical teachers' certificates of the first, second and third class should be awarded". [4]

There was, however, no response, despite the fact that educationists of the standard of Dr B.M. Narbeth and Dr H.E. Jones submitted reports emphasising the necessity for properly trained teachers. [5.6.]

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1. Union Department of Education, 1912 report. Paragraphs 16-18.
2. "Education of Adolescents in South Africa." op cit. p.98.
3. Ibid. p.98.
4. Union Department of Education. Report for 1914 & 1915. p.31. (Typescript).
5. B.M. Narbeth. "Some Notes Upon Technical Education". P.Davis & Sons Ltd. Durban. 1915. p.77.
6. H.E. Jones. "Developments in Education with Special Reference to Technical Education." Technical College Durban. 1920. p.34.

The report of the Second Education Administration Commission gave much thought to this problem of training technical teachers. "It is rather for the post of instructor that special training is required. Neither the journeyman workman, nor the ex-pupil of the school, taken as a type, is satisfactory. The one is apt to know too little about teaching, the other too little about the craft in its wider bearings." [1]

The Commission went on to state two further opinions. The first was that it was time to discard the pupil-teacher system and train all types of teachers in general institutions, provision being made for such special courses as were necessary to suit the specialist work to be done. The second opinion was that skilled craftsmen and others with special technical attainments would be the most suitable candidates for posts in technical and industrial schools and suggested that short courses of training in the art of teaching should be instituted at suitable centres.[2]

2.15.2(2) Examinations Several attempts were made at starting courses for training teachers of technical subjects (as opposed to workshop practice). Mr W.J. Moylen, who was employed at the Pretoria Technical College for many years, obtained the first technical teachers' certificate. He had had to produce to the Technical Adviser of the Union Education Department evidence of the examinations he passed in Kimberley, set by the South African School of Mines and Technology, in Mathematics, Heat Engines, Machine Design, Theory of Structures and Strength of Materials. He then underwent further written and oral examinations in Mathematics and a written examination in Heat Engines. Then he wrote a number of papers in the subject, Theory and Practice of Education, and subsequently taught a lesson in the presence of an inspector of schools. This all occurred in 1922 and the certificate was issued on 19th May 1923.[3]

In the years 1924, 1925 and 1926 a total of four men started private study for technical teachers' certificates. The records of

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1. Second Report of the Education Administration Commission. op cit. p.59.
2. Ibid. p.59.
3. Personal interview with the late Mr W.J. Moylen, 18th February 1966.

the Examinations Section of the Department of Higher Education showed that only one completed the course, Mr A.A. Rowan, who afterwards became Chief Technical Inspector of the Department of Education, Arts and Science. He obtained the certificate in 1927 having passed examinations in Mathematics (Teachers'), Strength of Materials (Teachers'), Educational Psychology, Theory and Methods of Education and Practical Teaching.

Professor Eric Philips, Vice-Principal of the University of Natal, embarked on a student-teacher course in his second year of study for the B.Sc.(Electrical) degree, which eventually led him to a technical teachers' certificate examination in 1929. He wrote examinations in Educational Psychology, Principles and Methods of Education and in two special method subjects - Electrotechnics and Mathematics. He did his practical teaching test in 1930. [1]

Amongst all these it is to be noted that there were no workshop teachers nor is there any mention of an examination for them until January 1927 when regulations were drawn up for a National Trade Instructors' Diploma. These were promulgated in February of the same year. Since they indicate a pattern that was followed until comparatively recent times, it will be as well to examine it.

The minute reads:

"The National Trade Instructors' Diploma (Provisional) will be awarded to candidates who have satisfied the following conditions:

(i) A general educational qualification of a standard equivalent to at least the Junior Certificate (standard VIII).

(ii) At least two years' workshop or practical experience as a qualified artisan.

(iii) Have passed the following examinations conducted by the Department :

(a) A language test: Either or both of the official languages. The test may involve questions on general knowledge and technical

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1. Personal interview with Dr. Philips, 1st July 1966.

expressions and terms used in the selected trade.

(b) A trade test:

(i) Theory of the trade.
(ii) A trade drawing test (where applicable).

(c) Theory and Practice of Education:

(i) General paper (Psychology).
(ii) Teaching methods, class organisation etc. appropriate to the trade.

In addition to the above, practical tests may be required.

On production of evidence of at least one year's satisfactory teaching experience and (if required) undergoing a teaching test, holders of the Provisional Diploma will be awarded the final National Trade Instructors' Diploma. [1]

There are several points to be noted in connection with this qualification. The first is that there was no immediate response. It was only in 1930 that the first two trade instructors passed this examination. In 1931 thirty-two attempted it but only ten passed; in 1932 eight entered and three passed while in 1933 the figures were 15 and 2 respectively. [2] *Of course in 1927 there were only seven industrial schools and twelve trade schools under the control of the Union Department of Education.* [3] *The next point is that, perhaps understandably, the academic standard required as an entrance qualification was very low. It was no wonder that Dr.S.F.N. Gie, the Secretary of the Department, complained about the standard of the teaching and that some means of recruiting teachers of technical subjects from industry should be found.* [4]

Whether it was because of Dr.Gie's disquiet over the situation or not, it is not possible to say, but a conference on the training of vocational subjects teachers was held in Cape Town from 22nd July to 24th July 1929, the outcome being that courses and syllabuses were drafted for the training of teachers in Art, Commerce and Technology

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1. *Union Department of Education. National Technical and Commercial Examinations Advisory Committee, January 1927. E64/2/27 of 8/2/27.*
2. *Records of Examinations Section, Department of Higher Education.*
3. *Union Department of Education. 1927 report. op cit. p.6.*
4. *Ibid. p.44.*

by representatives from the Union Department of Education, the technical colleges, the universities and the provinces (with the exception of the Orange Free State). The idea was, of course, to train teachers not only for the Union Department schools but also for the provincial schools. In point of fact the provincial authorities, according to the Secretary, were already employing most of the domestic science teachers trained at the technical colleges. [1]

Further information about this conference is given in the minutes of the Council of the Natal Technical College and in its Principal's report for 1929. In brief, there were to be type A teachers, graduates, with practical experience and trained at a university. Type B should be the technician type, trained in a technical college and examined by the Union Department of Education. [2] The new scheme was to start in 1930. [3]

The details of the courses prescribed for the technical teachers and the workshop instructors appeared in a Handbook G of the Union Department, a copy of which cannot be traced, but are also given in the sub-committee's minutes of the Natal Technical College Council which reported on 20th April 1933 on the feasibility of starting courses for these men. [4] The workshop instructors' course had not altered materially from that discussed before but the technical teachers' course had and so the details are given. The candidate had

(a) to have completed an apprenticeship,

(b) to have passed the Advanced Technical Certificate, Part Two,

(c) to have passed either an extra subject on this level or carried a subject already passed to the teachers' grade.

They then had to pass

(d) either one official language on the A level or both on the B level, together with Educational Psychology, Theory and Methods of Education, and Practical Teaching and Blackboard Work.

This pattern persisted for many years. It was of much higher

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1. Union Department of Education. 1929 report. op cit. p.28.
2. Natal Technical College. Annual report, 1929.
3. Union Department of Education. 1929 report. op cit. p.28.
4. Natal Technical College. Report of sub-committee of the Council. 20th April 1933.

standard than the workshop instructors' certificate and was intended for men who were going to teach engineering drawing and allied subjects in the technical high schools and trade schools and also for those who were to teach in apprentice schools.

2.15.2(3) Recruitment of Teachers. It is one thing to prescribe regulations and another thing to offer training courses likely to attract men into a profession considered, even then, to be overworked and underpaid. It should be remembered that technical teachers and trade instructors were not recruited straight from school but after six or seven years in industry. Some would be married and some contemplating marriage. They would have been expected to pay tuition fees for a part-time course extending over at least two years. On qualifying, their salary would have been lower than that received in industry although, of course, their final salaries would have been much more than those received by artisans. Single men may contemplate losing salary for an ultimate benefit but it is very difficult for married men to do this.

Professor M.C. Botha wrote "For years the Department has found it difficult, and often impossible to recruit the necessary teaching staff owing to the fact that our salary scales have been so much lower than those obtaining under the provincial administrations. The inevitable result has been that the best qualified teachers could either not be induced to enter our service, or, having entered, in due course found more remunerative as well as more congenial posts elsewhere. For not only is it true that in some of our institutions, such as industrial schools and reformatories, the teacher's or instructor's task is rendered more difficult and more responsible by the nature of the pupils to be taught ..... ; it is also undoubtedly true that the diversified and practical nature of the education given, in many ways involves additional and often onerous administrative duties for the principal and his staff." [1]

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1. Union Department of Education. 1935 report. op cit. p.16.

Recruitment continued to be difficult over the years despite gradually increasing salary scales because, in most cases, insufficient allowance was made for industrial experience. As a result the initial starting salaries were not high enough to compensate men from industry for what they were losing. This was, however, to a very large extent, rectified in the last salary scales published, and recruitment last year was better than it had been before. It was possible to select carefully, a thing which was not always possible before.

2.15.2(4) Raising of Entrance Qualifications. Following the 1930 regulations there have been published in 1936, 1939, 1946, 1952, 1959 and 1968 new handbooks of courses, syllabuses and regulations. As might be expected the general trend has been to raise standards. Particularly has this been so in the case of the workshop teachers' course, but to a limited extent it was so with the technical teachers' course. Naturally the professional subjects syllabuses have been kept in line with research in psychology and principles and methods of education, but what is of most significance here, has been the raising of entrance qualifications to the courses. Perhaps the best way to deal with this is to give the latest regulations.

There are now two courses for each certificate, a one-year full-time course and a part-time course of at least two years' duration. Irrespective of any other requirement, passes in the two official languages on the Senior or equivalent grade are a pre-requisite.

For the National Teachers' Diploma (Workshop) the entrance qualificationa are -

(i) The National Senior Certificate (Technical) and apprenticeship; or

(ii) The National Technical Certificate, (Part 111) and the two official languages in the Senior Grade and apprenticeship; or

(iii) A recognised equivalent, and the two official languages on the Senior Grade, and apprenticeship.

A candidate must have had at least two years' recognised post-apprenticeship industrial experience and the qualifications mentioned above must include the relevant trade theory or else the candidate

will have to pass this before the teachers' diploma is awarded.

The prescribed subjects are:-

Group 1. Examination Subjects.
Educational Psychology
History of Education
Educational Principles and Teaching Methods
Practical Teaching and Blackboard Work
School Hygiene and First Aid
Afrikaans (written and oral)
English (written and oral)
Method of Trade Instruction
Method of Technical Drawing

Group 11 Credit Subjects
Physical Education
Religious Instruction

Group 111 Non-examination Subjects
Singing and the Appreciation of Music
Drama and Speech Training

The part-time course is virtually the same as this except that Educational Psychology is written in two parts, the first or preliminary paper having to be passed before the final paper may be attempted. In addition Group 111 falls away.

It can be seen that there has been a considerable improvement not only in the entrance qualifications but also in the whole examination if it is remembered that the same examinations in professional subjects are written by all vocational student-teachers. It has proved true that many of the student workshop teachers find the course very difficult now. After all, their background is virtually matriculation, as far as academic studies go, offset to some extent by a five year apprenticeship and a few years as artisans to give them that much more knowledge of everyday affairs. There is no doubt, though, that they benefit from the course and the quality of teaching is much better than it was even ten years ago.

The National Teachers' Diploma (Technical) course, too, has a somewhat different entrance qualification. Admission qualifications are:-

(i) A degree in engineering or

(ii) A degree in pure science or

(iii) A degree in applied science or

(iv) A National Diploma and both official languages in the senior grade.

Each of these qualifications must include at least two subjects which are taught in technical high schools or technical colleges.

National diplomas are such as the Engineering Diploma, the Building Diploma, the Production Engineers'Diploma, the various technician diplomas and the diploma in Pharmacy. All of these demand the requisite industrial experience. Graduate student-teachers must have had three-years' post graduate experience. The reason for this may not, at first sight, be apparent, but graduates who from the start.desire to teach should proceed to the Education Faculty of their university to acquire their teaching qualification. The National Teachers' Diploma is for those who, after acquiring some industrial experience, decide that they wish to teach. Often they are not then in a financial condition to finance a further year's study at a university.

The subjects that are precribed are the same as for the workshop teachers except that the method subject choice is wider. They are required to take two courses from the following list: Method of Mathematics, Method of Science, Method of Technical Drawing, Method of Technical Subjects, Method of Trade Instruction (if they have served an apprenticeship and have passed the requisite trade theory).

The part-time course has the same restrictions as that for workshop teachers.

In the case of both diplomas, the candidates must have had a certain minimum number of hours of practice teaching.

In this course, too, the standard has been raised from what it was, but possibly not as noticeably.

2.15.2(5) The Bursary Scheme. In his 1939 report Professor M.C. Botha reminded us that "in-service" training of teachers had become an important feature of the educational systems of nearly every country.[1] Nothing much was done in this connection in South Africa for some years. In 1955 Mr. v.d. Walt gave the staff position in technical high schools. He revealed that there were 101 academic

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1. Union Department of Education. 1939 report. op cit. p.40.

posts of which 84 were filled with permanent staff members, 10 by temporary incumbents and 7 were vacant. There were 168 posts for workshop instructors of which 151 were filled by permanent staff members, 4 temporarily and 13 vacant. This position was not too serious. In his next report, however, the Secretary indicated that a difficult staff position was still obtaining at the technical colleges. He then indicated that some scheme of bursary awards was under consideration.

In October 1957 the Department of Education, Arts and Science, through its new Secretary Dr. J.J.P. Opt'Hof, requested permission from the Treasury and from the Public Service Commission to recruit suitable candidates from industry to be trained in a one-year full-time course as technical teachers. [1]

The reasons for the request were that the rapid development of industry was demanding more artisans than ever before and certainly more than the existing facilities could provide. Furthermore these artisans needed to be better trained than ever before. The need could only be met by expanding training facilities in the technical high schools and in the technical colleges. This required more trained teachers and in order to attract suitable, experienced men from industry it was deemed necessary to offer free training and, in addition, to pay the student-teachers what they would have received had they gone direct to a school as an uncertificated teacher. They were to be required to sign a contract to serve the Department for two years after the completion of the course. After successful completion of the course the teachers would be posted to schools, receive an increment for one year's service and another in recognition of the teachers' qualification. Forty posts were required, twenty for technical teachers and twenty for workshop teachers.

The necessary permission was obtained and advertisements placed in many newspapers throughout the country. A good response resulted

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1. Letter to Treasury and to Public Service Commission dated 12.10.57. (Appendix 2.)
2. Department of Education, Arts & Science. 1957 report. p.1.

and this is reflected in the fact that the examination entries rose from 33 in 1957 to 58 in 1958 in the case of workshop teachers and from 42 to 58 in the case of technical teachers. [1]

The system is still used but as far as the provincial authorities are concerned only for the training of workshop teachers. It is felt that the provincial bursaries cater adequately for academic staff.

Thus the position today is that usually there is a sufficient supply of workshop teachers, because an attempt is made, when estimating the number of student-teachers to send on the course, to allow for retirements and for the ever-increasing number of pupils seeking places in the technical high schools.

2.15.3. Courses at Technical High Schools before inter-departmental co-operation.

In paragraph 2.12. the courses which boys in trade and industrial schools followed were discussed. From time to time new handbooks of courses were brought out as syllabuses were revised or standards raised. The courses described in 2.12. were in use up to 1940. Then a new handbook was issued which differed a little from the previous one. As far as the Preliminary Technical Certificate was concerned one subject was added to the Group 11, Physiology and Hygiene, and workshop practice was included in the list of Group 11 subjects and so, presumably, a boy could now fail this subject provided he passed in four other subjects in this group.

Much the same procedure seems to have been followed in the National Trade School Certificate course but the grouping seems to be rather different. In addition, instead of passing with four subject successes, the number required now, was five.

Group 1 One official language on the A or B level as for the Junion Certificate examination.

Group 11 One subject from Mathematics 1 or a Trade Theory.

Group 111 Workshop Practice corresponding to the trade theory.

Group 1V Two from - Engineering Drawing, Practical Geometry, Bookkeeping and Commercial Arithmetic.

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1. Statistics obtained from Examinations Section, Department of National Education.

Second official language A or B level as for the Junior Certificate.
Mathematics 1.
Physical Science 1 or Chemistry 1 or Physics 1.
Geology 1.
Trade Theory.
Any other subject from the National Technical Certificate, Part One, course.

This last provision meant that Building Construction (Elementary) could be taken in place of Engineering Drawing or Practical Geometry and doubtless students engaged in building trade subjects would have done this because it would have been more appropriate than Engineering Drawing and more popular than Practical Geometry, which latter subject was never much favoured by schoolboys (nor for that matter as Graphics 1 by university first year students).

It will be noticed, too, that Mathematics was not a compulsory subject and although most schools certainly taught it, it was not necessary to pass to gain a certificate. The same was true of a science subject, and it was a fact that many trade schools did not teach a science subject. This was not sound policy because it is obviously true that Mathematics and, say, Physical Science, are the subjects upon which any technical studies must be based.

The second official language was not compulsory. Again most schools taught it but the pupils were often half-hearted in their attempt to master the second language.

Previous to this, the standard 1X course had been internally examined, moderated by the Department and certificates issued by the Department. This handbook prescribed syllabuses, courses and examinations for a National Technical Certificate, Part Two. It was primarily set for part-time students but full-time students were allowed to, and did, enter for the examination. It was, to a limited extent, a preparation for the Senior Certificate examination. The two group courses which are of interest in the present context are the Engineering Course and the Building Course. It was necessary to pass in three subjects but, of course, all subject successes were

recorded on the certificates.

	Engineering Course	Building Course
Group 1.	One subject from:- Aeronautical Engineering Applied Mechanics 1 Blacksmithing 11 Electrotechnics 1 Electric Wiring 11 Machine Construction 1 Drawing for Boilermakers 1 Structural Steelwork 1 Electrical Drawing 1 Motor Car Construction 11 Telephony and Telegraphy 1 Lines 1	One subject from:- Applied Mechanics 1 Bricklaying 11 Building Construction and Drawing 11 Carpentry and Joinery 11 or Woodmachining 11 Painting and Decorating 11 Masonry 11 Plastering 11 Sanitation 1 Signwriting 1
Group 11.	Two from:- Chemistry 11 Geology 11 Heat Engines 1 Mathematics 11 Industrial Metallurgy or Foundry Metallurgy Physical Science 11 (not with Physics 11 or Chemistry 11) Physics 11 Any subject from Group 1 not taken.	Two from:- Drawing and Decorative Design 1 Drawing for Plumbers 1 Mathematics 11 Physical Science 11 (not with Physics 11 or Chemistry 11) Physics 11 Chemistry 11 Any subject from Group 1 not taken.

The objections to this course, for use by full-time pupils, was that it was not sufficiently demanding. The examination papers were set primarily for part-time apprentice students and these had much less time per subject than the full-time pupils. There was no language examination at all and in the mathematics course no geometry was prescribed. Neither physical science, physics nor chemistry were compulsory. Hence as a first year of preparation for a matriculation exemption certificate it had less value than it might have had.

On the other hand for pupils who left school at this stage it had the advantage of leading direct to the next part of the National Technical Certificate examination.

In the technical high schools attached to technical colleges, the subjects were selected to form part of the preparation for the Senior Certificate course and the official languages were added as an internal examination. Thus a common course was English A or B, Afrikaans A or B, Mathematics 11 (and some geometry as an internal addition to the course), Physical Science 11, Machine Construction 1 or Electrical Drawing 1 or Building Construction, Applied Mechanics 1. This combination, with or without trade theory, led towards the second year of the matriculation

course which contained these identical subjects on the next grade.

A pupil who failed the matriculation exemption examination was often able to claim the National Senior Certificate or National Technical Certificate, Part Three, certificate and proceed, in a technical college or continuation class, to the next grade of technical certificate, the Advanced Technical Certificate, Part One.

The next handbook to appear was in 1945. This mentioned, for the first time, conditions to be fulfilled by full-time pupils in the technical high schools. Provision was still made for a trade school certificate, and there was a definite move towards a measure of compulsory bilingualism. Thus the standard VII course was:

Group I First official language A.
Second official language A or B.

Group II Three subjects from:
Civics or History or Geography.
Drawing
Mathematics
Physics or Physical Science
Trade Theory
Workshop Practice

It can be seen again that neither the passing of Mathematics or Physics or Physical Science was compulsory. Nevertheless this provided a better balanced course and was a significant move in the right direction. The papers were, however, still set for part-time students and so were possibly a little "light".

The National Junior Certificate course as permitted until June 1946 will not be discussed because it was not significantly different from the preceding course. From June 1946, however, the examination requirements were six subject passes, the subjects being selected as follows:

Group I First official language A.
Mathematics 1

Group II Second official language A or B.

Group III Three subjects from:
Physical Science 1 or Chemistry 1 or Physics 1 or Geology 1.
Engineering Drawing or Practical Geometry.
Workshop Practice

Group IV A trade theory related to the workshop practice.

This was, of course, a much better course and much more demanding than the previous ones had been.

The National Trades School Certificate course now became:

Group 1 *First official language A or B (as for the Junior Certificate)*
Second official language A or B (as for the Junior Certificate.

Group 11 *Workshop Practice*

Group 111 *Two subjects from:*
Engineering Drawing or Practical Geometry
Mathematics 1 or Workshop Calculations 1
Physical Science 1 or Chemistry 1 or Physics 1

Group 1V *Trade theory allied to workshop practice.*

This marked a step in the right direction. Five subjects had to be passed and hence a failure in one official language would have been permitted or a failure in one of the Group 111 subjects. It is to be noted that the subject Workshop Calculations was introduced. It was introduced for pupils, full-time or part-time, who found Mathematics very difficult. The idea, one supposes, was well-intentioned, but in practice the paper proved quite difficult being primarily arithmetical in nature and, therefore, demanding rather more accuracy than the non-mathematical type of pupil was capable of giving. It was also not recognised for matriculation exemption purposes and so was of no help for a pupil purposing to proceed this far, who was thus compelled to take the Junion Certificate course. For those pupils intending to proceed to National Technical Certificate, Part Two and Part Three, courses, the subject Workshop Calculations 11 and 111 was provided. If a pupil hoped to proceed to Advanced Certificate level, however, he was again at a serious disadvantage because his mathematical background was too weak.

There were no other significant changes in the National Technical Certificate Part Two or Part Three course, except this introduction of Workshop Calculations. The Senior Certificate course, however, took on a different appearance. The examination requirements were passes in six subjects selected as follows:-

Group 1 *First official language A.*
Mathematics Senior or Mathematics 111

Group 11 (from June 1947)
Second official language A or B.

Group 111 One subject from:
Applied Mechanics 11 or Applied Mechanics Senior
Chemistry 111 or Physics 111 or Physical Science 111
Electrical Construction and Drawing 11 or Machine Construction and Drawing 11 or Machine Construction and Drawing Senior or Building Construction 111 or Building Construction and Drawing Senior.

Group 1V Two subjects from:
Trade Theory
Electrotechnics 111 or Electrotechnics Senior
Elementary Strength of Materials
Any other N.T.C. 111 subject.

Some explanation is required here because the option is given between some subjects in grade 111 or the senior grade. In point of fact the senior grade syllabus was a perfectly straightforward combination of grades 11 and 111 and if a pupil wished to pass the subject in two parts taking one examination in N.T.C. 11 and another in N.T.C. 111 they were free to do so. In practice it didn't work out that way because the Senior Grade paper was a three-hour paper testing the work of two syllabuses and hence, in the nature of the syllabuses, had to include more elementary questions than the N.T.C. 111 paper did. The practice did not continue long - only until shortly after the publication of the next handbook in 1951, when these courses were dispensed with by a new regulation which came into force.

On page 113 it was mentioned that in 1953 standard V1 pupils were admitted to high schools. Whether this had been anticipated by the Department of Education, Arts and Science or whether it had prior knowledge, is not known, but the 1951 handbook, which devoted a section to full-time courses for pupils at technical high schools, gave a National Standard V1 course for full-time pupils. This may, of course, for the first two years have been used only by the pupils at the industrial schools (Children's Act schools). It was required of a pupil to pass in four subjects selected from the following:-

First official language A
Second official language A or B.
Mathematics or Arithmetic
Drawing or Science or History or Geography.

In addition 6 hours per week were to be given to workshop practice of a general (or what is now called basic) nature and 2 hours per week to physical education and citizenship. No mention was made in this handbook of religious instruction as a non-examination subject.

The general nature of the workshop practice was obtained in the first few years by circulating the standard Vl pupils through the various workshops, the idea being to give them a chance to reveal any particular aptitude they might possess for any one trade. This was not entirely satisfactory because no particular teacher was responsible for them and hence there was no co-ordination of the work. This was rectified later, as will be seen.

The National Technical Standard Vll was the name which replaced Preliminary Technical Certificate, for full-time pupils. It remained a requirement that five subjects had to be passed but the grouping now became -

Group 1	*First official language A.*
Group 11	*Second official language A or B.*
Group 111	*Mathematics or Workshop Calculations*
Group 1V	*A trade theory*
Group V	*One subject from:* *Civics or History or Geography* *Drawing* *Physics or Physical Science* *Workshop Practice*

This was quite a different grouping from the previous one because it made four groups compulsory (except for an option of workshop calculations). It should be mentioned that, for pupils not of South African descent, under Group 11 a language other than Afrikaans was allowed - French, German or Portuguese, and for Bantu children the provision was made that they could take under Group 1 either of the official languages and under Group 11 their own language. This applied until very recently in all grades of technical certificates.

The 1951 handbook made no mention of a Trades School Certificate. This was dispensed with entirely. The standard course that had to be followed was the National Junior Certificate (Technology) course. The examination requirements were passes in six subjects selected as follows:-

Group 1	*(a) First official language A.* *(b) Second official language A or B.*
Group 11	*Mathematics 1 or Mathematics (Junior) or Workshop Calculations 1.*
Group 111	*(a) Physical Science 1 or Chemistry 1 or Physics 1 or Geology 1.* *(b) Engineering Drawing or Practical Geometry or Building Construction 1.* *Electrotechnics 1*

Group 1V Workshop Practice
Group V A trade theory allied to the Workshop Practice.

Candidates who proposed to proceed to the Senior Certificate were advised to take two subjects from Group 111.

Mathematics (Junior) was re-introduced. It differed from Mathematics 1 in that some geometry was included.

The next step forward introduced by this handbook was the prescribing of a National Intermediate Certificate (Technology) course. The examination requirements were passes in six subjects selected as follows:-

Group 1 (a) First official language A (Intermediate)
(b) Second official language A or B (Intermediate)

Group 11 (a) Mathematics 11
(b) Applied Mechanics 1 or Chemistry 11 or Physical Science 11 or Physics 11

Group 111 Two subjects from:
Building Construction and Drawing 11 or Electrical Construction and Drawing 1 or Machine Construction and Drawing 1.
Electronics 1
Electrotechnics 11
Heat Engines 1
Telephony and Telegraphy 1

The significant improvement was the provision of properly graded language papers in this grade which formed part of the preparation for the senior grade courses. The disadvantage was making Applied Mechanics 1 an alternative, for examination purposes, to Physical Science, Physics or Chemistry. Technical students intending to proceed to advanced technical courses needed this knowledge to lead them to such subjects as Strength of Materials, Theory of Structures, Machine Design and Theory of Machines. As a result most technical high schools offered both Applied Mechanics and Physical Science despite the fact that both were not simultaneously examination credits. They were, of course, shown on the certificates of successful candidates. The other disadvantage was the continued use of N.T.C. 11 papers which, as previously explained, were primarily set for part-time candidates.

The National Senior Certificate course followed exactly the same pattern as the National Intermediate Certificate course and suffered from the same disadvantages.

This 1951 handbook was, with minor admendments, in use for many years (for part-time candidates it is still in use in apprentice classes). In 1963, however, a separate handbook was issued for full-time pupils at technical high schools and a complete break with syllabuses used for part-time students was made. Advantage was taken of this to prescribe the non-examination subjects which were to be followed and to draw up syllabuses much more suited to the age groups of the full-time pupils and to the time which they had to devote to their studies.

The National Standard Vl Certificate examination became an internal examination. Certificates were not issued to full-time pupils unless they left school to take up employment. To obtain a pass pupils were still required to pass in four subjects selected as follows:

Group 1 — *Afrikaans A or English A*

Group 11 — *Afrikaans A or B or English A or B provided it was not the language selected under Group 1.*

Group 111 — *Two of the following subjects:*
Mathematics
Drawing
Physical Science
Workshop Practice and Theory

Full-time pupils were also required to take the following non-examination subjects:-

(i) Religious Instruction
(ii) Singing and Appreciation of Music
(iii) Physical Education
(iv) Citizenship

In addition the course included instruction and an examination in Accident Prevention for which subject a syllabus had been prepared and had been approved by the National Occupational Safety Association.

This was a better course than had previously been prescribed because all the pupils followed the complete course which was well designed as a basis on which to build a balanced technical education, that is, sufficient attention was given to the formative subjects. There was, however, a serious disadvantage for technical students that the certificate could be obtained without a pass in mathematics or physical science, and as will be seen later, these subjects are

virtually compulsory for a Senior Certificate pass. Things were made a little worse by allowing standard VI pupils to be promoted to standard VII provided that they passed one of the official languages on the A-grade and passed in two other subjects. This proved a bone of contention for five years before something was done about it. Then it was decided that a pupil had to pass the examination before being promoted. Another regulation which made the course too easy for the average pupil was that a principal was allowed to condone one subject for a certificate provided that in the fourth subject the pupil gained more than 30% of the maximum marks for that subject. This regulation, too, was cancelled in 1968.

The subject Citizenship was discarded and replaced by History in 1966.

A definite step forward was taken by the combining of Workshop Practice and Trade Theory into one subject. It was always difficult to determine which was which and by this combination, topics which were better dealt with by handling and demonstration in a workshop rather than by a written question on a theory question paper, were catered for in that way. By now most technical high schools had been provided with special workshops called basic workshops solely for use by the standard VI boys. The syllabuses followed by these boys implied that they made some acquaintanceship with fitting, elementary electrical work, woodwork, motor mechanics and perhaps some building. Furthermore teachers were appointed especially for the task of guiding these boys through the basic course and observing them carefully. They were then quite often able to advise boys and parents as to the trade direction in which the pupils showed some aptitude and inclination.

The introduction of History into the course in place of Citizenship needs a little more consideration. Citizenship had been a non-examination subject. History became an examination subject and hence fell under Group III. It therefore made it possible for a pupil to pass the examination without success in mathematics, science and drawing or workshop practice and theory. In a technical high school, with the set purpose of preparing boys for entry into a trade (in most

cases), this was not desirable. It appears that this matter still requires consideration and will doubtless have to be brought into line with the provincial requirements for a pass in standard VI in the near future. This is not to say that a study of history should not form part of the course - it is highly desirable. The point is that pupils who proceed to senior level have to pass mathematics and science as will be seen when this course is considered and hence a firm foundation in these subjects must be laid in the elementary grades. It might, therefore, be advisable to make the two languages, mathematics and science the compulsory subjects for promotion to the streams which go to standard X level, with a fifth subject to be either drawing or workshop practice and theory. History would then be grouped with the non-examination subjects.

The National Standard VII Certificate examination also became an internal examination. The examination requirements were passes in five subjects selected as follows:-

Group I	Afrikaans A or English A
Group II	Afrikaans A or B, or English A or B, provided it was not the language taken under Group I.
Group III	Mathematics or Drawing (if not taken under Group V)
Group IV	Workshop Practice and Theory
Group V	Drawing or Physicial Science

The non-examination subjects were the same as for the standard VI course.

This course,as first prescribed,was an improvement on the standard VI one in that either mathematics or physical science had to be passed in order to pass the examination. The principle of condonation in one subject was permitted just as in the standard VI course which tended to make the pass a little easier than it should perhaps have been at this stage.

Standard VII pupils were allowed promotion provided they passed in one of the official languages on the A-grade and in three other subjects. Here again, then, was the bugbear of boys being allowed to go on to the next standard without a pass in mathematics and science.

The introduction of history into the scheme of things made the matter worse just as it did in the standard V1 course.

The National Junior Certificate (Standard V111) course contained the same non-examination subjects as the previous two courses. The examination requirements were passes in six subjects selected as follows:-

Group 1	*Afrikaans A or English A*
Group 11	*Afrikaans A or B, or English A or B, provided it was not the language chosen under Group 1.*
Group 111	*Mathematics*
Group 1V	*Physical Science*
Group V	*Machine Drawing or Building Drawing*
Group V1	*Workshop Practice and Theory*

As this course was originally prescribed there was no choice of subjects. Hence the previous remarks about the necessity for passing mathematics and science in the previous grades. There was a concession made in that a candidate who, at one and the same examination, sat for six subjects, passed both official languages and three other subjects, obtaining at least 40% in four subjects and at least 33⅓% in a fifth subject and an aggregate of 240 marks in the six subjects, was awarded a five-subject certificate.

The introduction of history in 1966 again made it possible for a candidate to go on without a pass in mathematics or science.

The National Intermediate Certificate (Standard 1X) course followed precisely the same pattern as the Junior course except that Applied Mechanics was allowed as an alternative to Trade Theory. No history was introduced in this course. Thus it is seen that, trade selection apart, there was no choice in this course except for applied mechanics. Five subject certificates were given just as in the case of the Junior Certificate.

The National Senior Certificate course followed the same pattern as the Intermediate Certificate course and the same remarks apply. To obtain Matriculation Exemption candidates had to sit for at least six subjects at one and the same examination, obtain a grand total of 270 marks in six or seven subjects, obtain at least 40% in Groups 1, 11, 111 and 1V as listed above, and at least 33⅓% in one or two of the

remaining subjects.

2.15.4. Basic Syllabuses

In the 1965 report of the Superintendent-General of Education it is mentioned that Professor Steyn was responsible for a report, published on behalf of the Joint Matriculation Board, which made a statistical analysis of the high rate of failures of first-year students at University. "In view of this phenomenon it is certain that the J.M.B. will insist on a higher standard for a pass in future from high school pupils who wish to qualify for matriculation exemption. Furthermore, owing to the remarkable advance that has been made in the past decades in the field of science and mathematics and the acceptance of new approaches in the teaching of modern languages, it is clear that educational authorities will have to keep pace with these developments or face the danger of not being able to maintain standards demanded by the new situation." [1]

The first step in this direction was the thorough overhauling of high school syllabuses, particularly in the sciences and mathematics, in order that adequate stress might be laid on new content and approach. The J.M.B. drafted basic syllabuses in the various subjects for the matriculation examination and these were used as the basis for the revision of the Senior Certificate syllabuses of the various education departments. These revised syllabuses had to receive the approval of the J.M.B. if required for exemption purposes.[2] An obvious result of this was that much greater uniformity in the content of syllabuses was achieved, encouraged by the co-operation resulting from the attitude of the members of the Committee of Heads of Education Departments and by the National Advisory Education Council. [3] Various inter-departmental committees were formed to compare and collate syllabuses in all grades of school work.

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1. Report of the Superintendent-General of Education for the Year 1965. p.5.
2. Ibid. p.5.
3. Ibid. p.10.

The Department of Education, Arts and Science took advantage of this to introduce some changes in courses as well as in syllabuses. The change in the standard Vl course for full-time technical students has already been mentioned on page 136. There is no need to comment again, either, on the non-examination subjects Religious Instruction, Singing and Appreciation of Music and Physical Education which are part of the work of every course in a technical high school, or on the subject of Accident Prevention which is taught in every course. Mention will, therefore, be made only of the new examination courses and regulations and comment offered where it seems to be necessary.

The National Standard Vll certificate subjects were re-grouped as follows:-

Group 1	Afrikaans A or English A
Group 11	Afrikaans A or B or English A or B, provided the language is not that selected under Group 1.
Group 111	Mathematics Drawing Physical Science History Workshop Practice and Theory

The National Standard Vll certificate was awarded to a candidate who sat for <u>seven</u> subjects and who obtained at least 40% in each of <u>four</u> subjects, including an official A language, and at least $33\frac{1}{3}\%$ in a fifth subject, provided both official languages were included in the five subjects. The above grouping, then, had to be complied with. The certificate was endorsed with five subjects, or with six or seven subjects if the candidate obtained not less than $33\frac{1}{3}\%$ in one or two of the remaining subjects, respectively.

This new grouping did nothing to remove the obstacle that a candidate could obtain a certificate pass without passing either mathematics or physical science.

A certificate was not issued to pupils unless they left school to take up employment. Promotion to the next standard was only granted to pupils who passed the examination and condonation of a fifth subject was done away with because of the introduction of the $33\frac{1}{3}\%$ pass mark in fifth, sixth and seventh subjects.

For the other courses, the National Junior Certificate (Standard Vlll)

the National Intermediate (Standard IX) and the National Senior Certificate, the Department decided to offer differentiated courses. These were to be known as the M Group courses and the technical or T Group courses. The M Group courses were designed to lead to matriculation exemption and the T Group to the ordinary Senior Certificate. Although ultimately based on the same basic (or core) syllabuses, the T Group courses were made lighter than the M Group in certain subjects - the official languages, mathematics, physical science for standards VIII, IX and X and for building drawing and machine drawing in standards IX and X. The first set of syllabuses came into effect in 1967 but were changed somewhat from 1968 to line up with the inter-departmentally approved basic syllabuses.

To give guidance to principals of technical high schools, schools of industry and technical colleges, the Department sent out Examinations Circular No. 29 of 1966, dated 2nd December 1966. The standard VI year was to be used as a trial year, the pupils being divided into two provisional ability groups on the basis of available information and then divided into class groups. Re-classification in standard VII was to take place wherever necessary.

In the first classification the recommendation of the Principal of the primary school, the pupil's performance in the primary school and his results in tests in English, Afrikaans and Arithmetic set on admission to the school together with the pupil's mental ability and aptitude were to be taken into account. (The mental ability and aptitude, it is assumed, were to be obtained from the Ed. Lab. card which, before the re-transfer of the vocational schools back to the Provinces, were supposed to be made available to principals of vocational schools during the selection period.)

In the classification after the standard VII year, the school was required to give educational guidance to the parents in the light of its information about and experience of the pupil, but it was stressed that, taking into account the pupil's own wishes, the parent had the final say as to the stream in which his son was to be placed. (A somewhat similar procedure is followed in some comprehensive schools

in England as will be seen by reference to Chapter IX and Appendix 4. It was stressed in the circular that school record, intellectual ability, the requirements of the course and the direction of study which the pupil wishes to follow at and after school, had also to be taken into account. Principals were required to ensure that all the implications of the proposed course should be made clear to parent and pupil.

Principals were reminded that pupils make the best progress towards the attainment of their ambitions if they choose subjects and courses within the scope of their abilities and potentialities. Hence pupils possessing the necessary potential should be encouraged to take the M group of subjects and pupils possessing the ability to obtain a Senior Certificate should be placed in the T group. A change of course is to be permitted wherever and whenever this seems desirable but only after the fullest consultation with parent and pupil and the former's permission in writing.

"At the end of the third term in standard VII the principal is required to address a letter to each parent containing the following information:

(i) An indication of the performance of the pupil in the various subjects.

(ii) Details of the courses and subjects offered at the school after standard VII.

(iii) A recommendation to the parents on the choice of a course for the pupil; alternatively, the parents should be invited to discuss the choice of course with the principal.

(iv) The statement that the course may be changed at any time, in the light of new information, and that the final choice of course made in standard VII is a pregrogative of the parents, but should a pupil desire a change of course thereafter he will have to qualify for such a change.

(v) A request to the parents to contact the principal about their child's choice and discuss the matter specifically in regard to the pupil's intentions concerning his future studies or vocational plans.

It is essential that parents should submit written confirmation of the pupil's choice of course and this document should be filed by the school for future reference."

Where pupils are allowed to change course, permission in writing from the parent is required.

If a pupil taking the M course does not make sufficient progress to warrant promotion to the next standard, the parents should be offered the following choice:

(i) either the pupil remains in the same standard in the M group for a further year, or

(ii) the pupil may be promoted to the following standard in the T group.

Lastly, the circular offered advice to principals on how to deal with parents who are not willing to accept the advice of the school.

(a) The parents should be invited to come and discuss the choice of course.

(b) The unduly high or low performance of the pupil for whom the wrong course has been chosen, should be used to convince the parents of the necessity for the change.

(c) The parents should be enlightened as to the adverse effect on the pupil's school career if too much or too little is required of him, as well as the adverse effect which an incorrect choice of course may have on his future career or study and vocational opportunities.

In principle, this differentiated scheme is excellent. To illustrate the point, figures from the Biebuyck report [1] *are quoted for the technical high schools of the Republic.*

	Std.V1	Std.V11	Std.V111	Std.1X	Std.X
1963	2 729	3 466	2 922	1 028	535
1964	3 146	4 122	3 051	1 289	438
1965	3 711	4 909	4 331	1 644	783
1966	3 939	4 735	4 480	1 542	744
1967	4 141	4 819	4 338	1 897	841

The underlined numbers indicate a five-year progression through

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1. *Report of the Committee on Vocationally-Directed Education for Boys up to Std.X or Matriculation. (Chairman Mr. L.J.T. Biebuyck) National Advisory Education Council. October 1968. p.8.*

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the schools. The figures show a high drop-out rate and that the largest group per year is in standard V11. After standard V111 many pupils leave school, probably for one or more of the following three reasons:

(i) Many pupils have not the ability to proceed further.

(ii) Economic conditions in the home force many to go out to work (especially in these days when apprentices are very well paid in comparison with even ten years ago).

(iii) Many enter apprenticeship as early as possible (i.e. at the age of 16 years).

The following table, taken from the same report,[1] shows how small a percentage of the candidates who enter the standard X examinations, pass.

YEAR	CANDIDATES	PASSED NTC 111	PASSED SENIOR CERTIFICATE	PASSED MATRIC. EXEMPTION
1965	736	194 = 26.3%	126 = 17.1%	176 = 23.9%
1966	769	119 = 15.5%	189 = 24.6%	160 = 20.8%
1967	861	128 = 14.9%	469 = 54.5%	124 = 14.4%

The result of introducing the T stream in 1967 is obvious from the percentage of boys obtaining a standard X certificate. It should be pointed out, however, that the drop in the percentage obtaining matriculation exemption certificates might well be due to some pupils writing the T stream examinations who would have passed the higher grade.

To revert now to the courses themselves. Consider first the National Junior Certificate (Standard V111) course.

	M. Course	T. Course
Group 1.	Afrikaans A(M) or English A(M)	Afrikaans A(T) or English A(T)
Group 11.	Afrikaans A(M) or B(M), or English A(M) or B(M) provided it is not selected under Group 1.	Afrikaans A(T) or B(T), or English A(T) or B(T) provided it is not selected under Group 1.
Group 111.	Mathematics (M) Physical Science (M) Machine Drawing or Building Drawing History Workshop Practice and Theory	Mathematics (T) Physical Science (T) Machine Drawing or Building Drawing History Workshop Practice and Theory

The non-examination subjects remained unaltered.

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1. Ibid. p.8.

The National Junior Certificate (M or T) is awarded to a candidate who sits for seven subjects and who obtains at least 40% in each of four subjects, including an official A language, at least 33⅓% in a fifth subject, and a grand total of at least 240 marks, provided that both official languages are included in the five subjects. The certificate is endorsed with five subjects, or with six or seven subjects, if the candidate obtains not less than 33⅓% in one or in two of the remaining subjects respectively.

A candidate who passes in five subjects but does not obtain the required minimum of 240 marks, must eventually pass in each of six subjects to qualify for the certificate.

The same objection remains that it is possible to obtain a five-subject certificate without passing in mathematics and/or physicial science. This cannot be justified in a technical course.

The National Intermediate and the National Senior Certificate courses, M and T, follow the same pattern except that history is no longer included in the curriculum, that differentiation occurs in the drawing subjects and that applied mechanics becomes an option to trade theory in the M course only.

Thus it is possible to obtain a five-subject T course certificate without passing either mathematics or physical science. This is not permitted in the M course where both mathematics and physical science are compulsory pass subjects.

The other point which needs discussion in relation to the Intermediate and Senior courses is the subject applied mechanics. It is at the present time an option to trade theory in the M course. A pupil proceeding to an engineering course at a university is going to study applied mechanics under the name of applied mathematics, the elementary parts of theory of machines, strength of materials and a variety of other related subjects, depending on the discipline of the university to which he goes as a student, in any case, and if he did not follow this subject at a technical high school he would be no worse off than a pupil from any other type of high school. A pupil proceeding from

an M-stream to a technical college to follow an engineering technician's course will start the subject from the beginning and follow it for two years in a four-year course. He, too, will be in no worse case than a pupil from an academic high school. On the other hand a pupil from the T-stream who enters an apprentice course at the NTC 111 or NTC 1V level will be completely lost without some knowledge of the subject. In a technical high school the subject is studied in considerable depth in the standard 1X and X years. It forms the basis for the study of strength of materials, theory of machines and machine design and it is not taught in the NTC 1V or V grades of an apprentice school.

Now there are very good reasons for excluding it from a T-stream (and for that matter from an M-stream) standard 1X and X course at a technical high school. For a pupil proceeding to an apprenticeship, the knowledge of trade theory correlates with his workshop practice. The two should not be separated. They are "part and parcel" one of the other. All students at technical high schools have to follow the course in workshop practice. This is the raison d'être of the technical high school and it has been generally found by the technical inspectorate that those pupils who do not follow the trade theory course simultaneously with the workshop practice course do not derive sufficient benefit from the latter to make it worth while. In many cases they lose interest in the practical course - in which case they might just as well be at an ordinary academic high school.

The solution at first sight seems to be to add a seventh subject, applied mechanics, to the curriculum. There is, however, a difficulty. The academic high school works 25 hours per week (minimum) and rarely more than 26 hours. The technical high school works a minimum of 32 hours per week and to add yet another four periods of about 40 minutes each to this week would make the week far too long, if it is remembered that the extra-curricula activities in the high schools and technical high schools are similar.

There is a last word in this connection. The new physical science syllabus includes a considerable section in mechanics. Unfortunately the new syllabus, particularly in the senior course is, in my opinion,

very long and overloaded. Were it possiblbe to allow some choice of sections in the syllabus, it might yet be possible to evolve a differentiated physical science syllabus for the T-stream candidates where enough attention could be given to the basic principles of statics, dynamics and elasticity, to prepare the pupils for the advanced apprenticeship courses.

2.15.5. Courses at Technical High Schools since 1968.

When the vocational schools were re-transferred to the Provincial authorities in April 1968, the control of the internal examinations and of the oral language examinations passed to the education departments of the Provinces.

To deal with the latter first, in the National Senior examinations before 1968, a B-language candidate could request an oral examination in that language and, although it did not count towards a pass in the subject, if he passed the oral examination his certificate was endorsed to that effect. Since November 1968 these tests have been made compulsory for full-time candidates in vocational schools. Before April 1968 the tests were moderated by language inspectors of the then Department of Education, Arts and Science. Since then these inspectors, except by invitation, have no access to the provincial schools. Hence the moderation (by means of sampling) of the oral tests has fallen on the already heavily burdened shoulders of the provincial circuit inspectors. Their findings are communicated through the provincial examination sections to the examination section of the Department of Higher Education.

In the technical high schools, as has been indicated, the standard Vl and Vll examinations are internal. These are the examinations, the control of which is in the hands of the provincial education authorities. The examinations in standards Vlll, lX and X are external and are conducted by the Department of Higher Education. The reason for this, according to the Minister for Education, is to ensure uniformity and because the numbers entering the examinations are fairly small and therefore it would be uneconomical to appoint examiners in

each province for such subjects as machine drawing and the various trade theories. This aspect will have to be dealt with in relation to all types of vocational schools and so will not be discussed here except to mention that an inter-departmental standing committee to deal with examinations in vocational schools has been created, its purpose being to advise the Minister in all matters relating to these examinations.

As far as the standard VI and VII examinations are concerned, the syllabuses of the Provinces are used wherever this is possible. This means at the present time in English, Afrikaans and Mathematics. It is anticipated that the syllabus in General Science will soon be used also. As far as the technical subjects, Drawing and Workshop Practice and Theory, are concerned it is anticipated that the present syllabuses will continue to be used. An amended syllabus in History will be used because, by inter-departmental agreement, two periods per week instead of one will be given to Religious Instruction and one period per week has to be found for Guidance. To find the requisite two periods is difficult in view of the already long school week in these schools. It has been decided therefore to reduce the number of periods given to History from four to three and lighten the syllabus somewhat. Where the other period is to be found is not finally decided.

The other change which will soon have to be effected is to make the conditions for obtaining a pass in the whole examination and in individual subjects, the same in all schools in a province. The conditions applying in technical high schools at present have already been discussed. The requirements in the Cape Province are as follows:-

(a) Standard VI

A pupil is required to pass

(i) the official language on the higher grade,

(ii) the other official language on either the higher or the lower grade,

(iii) either General Science or Mathematics,

(iv) any fourth subject (this may include General Science or Mathematics if the candidate passes in both);

and in addition obtain 40% of the aggregate of marks in five subjects, namely the two official languages and the best three of the remaining

subjects, provided that if a candidate takes both official languages on the higher grade, the aggregate will be the same as for a candidate taking one official language on the higher grade.

A candidate taking the two official languages on the higher grade and failing in only one of these languages, will be regarded as having passed the examination in the lower grade in that language, provided that he obtains at least 25% of the marks allocated to that language on the higher grade. If he fails in both languages on the higher grade, this provision will not apply.

For a pass in an official language on the higher grade a candidate will be required to gain at least 40% of the marks allocated to that subject.

For a pass in a subject, other than an official language on the higher grade, a candidate will be required to gain at least 33⅓% of the marks allocated to that subject.

All these pass marks are based on attainment during the year taking into account (i) marks allocated for work done in class;

(ii) tests set during the course of the year in the individual subjects as portions of the syllabuses have been completed; and (iii) formal periodic examinations.

No pupil is granted a pass in standard VI without the approval of the Inspector of Schools. Subject to such conditions as may be laid down by the Department, a pupil who has not satisfied the requirements for a pass in standard VI may have his failure condoned by the Inspector of Schools and be granted a pass.

A pupil with a speech defect may be exempted from the oral examination. He receives a mark equivalent to the percentage of marks obtained in the written examination.

The subjects of instruction in standard VI in academic high schools are somewhat different from those in the technical high schools.

Academic High School

(i) Afrikaans A or English A (4)

(ii) Afrikaans A or B, or English A or B (not the one taken under (i) ($3\frac{3}{4}$)

(iii) General Science ($2\frac{1}{2}$)

(iv) Mathematics ($3\frac{1}{4}$)

(v) Social Studies ($2\frac{1}{4}$)

(vi) Art as an examination or non-examination subject ($1\frac{1}{4}$)

(vii) Any one of the following: Woodwork, Agriculture, Art-Craft, Needlework and Domestic Science as an examination or non-examination subject. ($1\frac{1}{4}$)

(viii) Religious Instruction, Physical Education and Class Music (3)

Technical High School

(i) Afrikaans A or English A (4)

(ii) Afrikaans A or B, or English A or B (not the one taken under (i) ($3\frac{1}{2}$)

(iii) Physical Science ($3\frac{1}{2}$)
Drawing ($3\frac{1}{2}$)
Mathematics ($3\frac{1}{2}$)
History ($1\frac{3}{4}$)
Workshop Practice and Theory ($8\frac{3}{4}$)

(iv) Religious Instruction
Physical Education
Class Music (3)

(v) Guidance ($\frac{1}{2}$)

Times are given in hours/week/subject to nearest $\frac{1}{4}$ hour but are suggestions to Principals and not instructions.

The minimum time suggested for each subject is given in brackets for each subject in hours per week to the nearest $\frac{1}{4}$ hour.
At least 2 periods of 35 minutes to be devoted to Art under (vi) above and at least two periods of 35 minutes each to the subject selected under (vii) above if taken as a non-examination subject. If these subjects are taken as examination subjects additional time must be found as indicated below.

The remaining time of the school week (approximately 3 hours) should be used, as circumstances may demand, for the following:
(i) A third language (French, German, Greek, Hebrew, Latin, Southern Sotho, Tswana or Xhosa)
(ii) Art as an examination subject.
(iii) A subject from (vii) above taken as an examination subject.
(iv) Another subject from (vii) above.
(v) Music as an examination subject.
(vi) Guidance ($\frac{1}{2}$)
(vii) The activities referred to below

(a) Additional work in any subject to satisfy the needs of pupils who show particular aptitude for such a subject or to prepare pupils more fully for the Senior Secondary Course.

(b) Assistance to pupils in subjects in which they experience difficulty, or additional instruction for pupils who have been allowed to proceed because of their age.

(c) Activities such as debates, dramatic art, lessons in musical appreciation, or other activities approved by the Inspector of Schools.
(d) Instruction of girls in Home Nursing.

It is seen, then, that the school week of the academic school is between 25 and 26 hours and that of the technical high school about 32 hours. Apart from the non-examination subjects it appears that most standard VI pupils take seven subjects for examination purposes but that in a technical high school there is no choice of subjects. In the circumstances there seems no reason at all why the same examination pass requirements should not be required of boys in technical high schools as are required of pupils in other schools. This would then mean a 40% pass in the language taken on the higher grade, a 33⅓% pass in the second language, a 33⅓% in either general science or mathematics, a 33⅓% pass in a fourth subject and a 40% aggregate in five subjects. This would at least ensure that either mathematics or general science was passed at this stage. Of course, it would be better still to insist, for technical students, on a pass in both mathematics and general science as well as in both the official languages. If history were classified with the non-examination subjects, it would then mean that either drawing or workshop practice and theory would have to be of sufficient standard to bring the aggregate up to 40%. The chances are that workshop practice and theory would do that in any case, and, for most pupils, drawing is intended to give ability to read drawings rather than to become draughtsmen. Those who have ability enough to become draughtsmen will, in any case, find little difficulty with this subject.

It may be as well, now, to compare the subjects of instruction in standard VII in the two types of school. It should be noted immediately that in the academic high school a pupil is required to take <u>six</u> subjects for the examination compared with <u>seven</u> in the technical high school. The length of the school week in the academic high school is again between 25 and 26 hours compared with 32 hours in the technical school.

Academic High School	*Technical High School*
(i) An official language on the higher grade;	*(i) An official language on the higher grade;*
(ii) the other official language on either the higher or the lower grade;	*(ii) the other official language on either the higher or the lower grade;*
(iii) General Science;	*(iii) Mathematics, Drawing, Physical Science, History, Workshop Practice and Theory.*
(iv) Mathematics or Bookkeeping and Commercial Arithmetic;	
(v) and (vi) any two of the following: Mathematics if not already taken under (iv), Bookkeeping and Commercial Arithmetic, if not already taken under (iv), Social Studies, French or German or Greek, or Hebrew or Latin or Southern Sotho, or Tswana or Xhosa, Woodwork, Agriculture, Art or Art-craft, Needlework and Dressmaking, Domestic Science, Music, Typewriting.	

The non-examination subjects are the same in all types of schools - Religious Instruction, Physical Education, Music and Guidance.

In the standard VII examination in the academic high school, a pupil is required, on the basis of his attainment for the year to pass in

(a) the official language on the higher grade; *(Pass mark 40%)*

(b) the other official language on either the higher or the lower grade; *(Pass mark 33⅓%)*

(c) in two other subjects; *(Pass mark 33⅓%)*

and in addition obtain 40% of the aggregate marks in five subjects, namely the two official languages, General Science and the best two of the remaining subjects; provided that if a candidate takes both official languages on the higher grade, the aggregate will be the same as for a candidate taking only one official language on the higher grade.

The other examination regulations are as for the standard VI examination except that when a pupil clearly cannot benefit from further instruction in mathematics or in bookkeeping and commercial

arithmetic or when the interests of a pupil's career clearly require the concession, the Inspector of Schools may exempt the pupil from these subjects provided that one of the following alternatives is chosen:

(a) Social Studies or a third language, provided further that such pupil also takes two of the following subjects: Woodwork, Agriculture, Art or Art-craft, Needlework and Dressmaking, Domestic Science, Music, or

(b) Social Studies and a third language.

An analysis of the results of the majority of boys would indicate apparently an examination record of passes in the two official languages and general science, mathematics and social studies (or woodwork). An alternative might be to have commercial arithmetic and bookkeeping and typewriting in place of mathematics and social studies. The point is that general science is compulsory and, for most boys, mathematics. Comparing this with the technical high school course in which it is possible to pass without mathematics and physical science, we see again the weakness of the latter system. It seems obvious that the examination requirements for the technical high school should make mathematics and physical science compulsory pass subjects (33⅓%) and make history a non-examination subject. The emphasis would then be on the basic technical subjects and on the official languages.

2.15.6. *Failures in the standard VII course in Technical High Schools.*

The problem which would then confront the authorities would be what to do with boys who could not pass this amended standard VII course. There will be a fairly high percentage and these represent the group shown earlier who leave at the end of standard VIII or when they reach the end of the period of compulsion. These normally enter into an apprenticeship. It seems quite obvious that a third stream is required in the standard VIII year which, for the sake of a name, I shall call the A stream (A for apprentice or ambag).

The importance of the two official languages in any school course, because of the importance of communication, will be discussed in a later chapter. The two languages should certainly appear. Equally

certain is it that the drawing course should be continued and the course of workshop practice and trade theory. Because these pupils would leave at the end of this year much more time would have to be given to workshop practice and trade theory. Then, for examination purposes I would include the mathematics and engineering science course that is given in the N.T.C. 1 course in an apprentice school. These are much more "applied" courses than those given in the full-time courses and most pupils would benefit from them. This would enable them to enter an apprentice school in the N.T.C. 11 stream, resulting in an uninterrupted course of study with all the boost to morale associated with this. The kind of course and the time given to the various subjects might appear like this:

(i) First official language on the higher grade.	(3)
(ii) Second official language on the higher or lower grade.	(3)
(iii) Workshop Mathematics.	(3)
(iv) Engineering Science or Building Science.	(3)
(v) Machine Drawing or Building Drawing	(4)
(vi) Workshop Practice and Theory.	($10\frac{3}{4}$)
The non-examination subjects would remain the same as in the other streams.	($5\frac{1}{4}$)

In such a course a pass mark of 60% for workshop practice and 40% for trade theory could be expected, 40% for drawing and 40% in mathematics and science. If 40% in the first official language was obtained and $33\frac{1}{3}$% in the second these subjects should be endorsed on the certificate.

This would, to some extent, be a reversion to the old trade school certificate course but for many boys this is a necessity if frustration is to be avoided and pupils encouraged to strive to reach their own ceiling of ability.

It might, of course, be found that boys passing this N.T.C. 1 full-time course or A course, as I have called it, would be prepared to stop longer at school and follow a similar course on the N.T.C. 11 level. This, too, should be encouraged if only for the extra work done in the language subjects and the extra time given under skilled instruction in the fundamental trade skills. Of necessity there would have to be good liaison between the schools and industry to ensure that the

processes taught were of the type in use in industry. It is regrettably true that often industrial processes change more quickly than the schools realise. Every endeavour is made by way of arranging refresher courses, to keep instructors informed of latest developments, and in this respect the education authorities are deeply indebted to industrial undertakings, but this has not yet gone far enough. The idea of the sabbatical term, say every three years, when a number of instructors are returned to industry to observe, to practise and to learn new processes, should be very seriously considered. Industry would most certainly co-operate. The education departments might find this strange and difficult to accept. It would involve extra expense in that there would have to be a certain percentage of instructors available, over the minimum number required to staff the schools, in order to permit of the release of those whose turn it would be to go on sabbatical leave.

There is a growing tendency in industry to centralize the training of apprentices in the basic skills prescribed in the training schedules for each year of apprenticeship. Large firms and undertakings find this reasonably easy to provide but small firms find it too costly. Such firms would welcome accepting boys who have already worked through one or two years of the training programme because it is becoming more and more obvious that the days of "picking up the trade" by watching artisans at work are past. Industry has become far too technological for this practice to be of any value.

There is another matter in regard to these A courses which should receive consideration. A little earlier it was said that the non-examination subjects should remain the same for all courses and that history should be included in them. This is not to say that the history syllabus for the A courses should be identical with those for the T and M courses. There are topics of great importance that should be introduced to boys about to enter industry. Some elementary treatment of human relationships, industrial agreements and trade unions are

topics which come readily to mind and it would be far better if these were properly presented and discussed rather than gathered in a haphazard way by listening to them discussed in the workshop and factory. This would probably involve the inviting of guest speakers from industry to the schools. Here again it is reasonably certain that industry would co-operate and nothing but good could come of such an arrangement.

To summarise this section of Chapter 11 it must be obvious that there is a dire need for a third stream in a technical high school to cater for those lads who are going to be artisans and little more. They need specialist treatment to make them really good artisans, not only for the benefit of industry and hence of the national economy, but for their own well-being. There are few experiences in life as satisfying as that of knowing that a task has been well-performed - performed to the maximum of one's potential - and it seems obvious that such satisfaction should be the reasonable expectation of all people. True craftsmanship is not found in many industries today and the time is overdue for its re-appearance through a new approach in education, a re-appraisal of educational programmes and a thorough overhaul of curricula from the primary school to the highest level of technical college work.

CHAPTER 111

The Housecraft High School.

3.1. Introduction

There are at present only three housecraft high schools in the Cape Province. It was mentioned in Chapter 1 that they are not now protected by the provisions of Act No.41 of 1967, the Educational Services Act, and it is presumed that this was a deliberate action to give the Provinces a free hand to develop these schools as the local circumstances required.

The de Villiers Report, only twenty two years ago set out the principal aims of the courses given at the housecraft high schools as follows:-

"(a) To equip girls with the necessary knowledge of a domestic nature and develop their manual dexterity, thereby enabling them, if necessary, to earn a living by performing such domestic duties as home cooking, making and mending clothes, tending and caring for little children or otherwise being engaged as hospital, café, shop or hotel assistants.

(b) To train girls in home-management in order that they may be good and capable housewives and mothers by the time they are called upon to function as such.

(c) To educate them in culture, refinement, and other social virtues in order that they may be an acquisition to any social circle in which they may find themselves." [1]

To find some of these aims stated as late as 1948 is surprising and the fact that these schools have never been large, bears out this contention. However there is a need for schools of this nature but following curricula which are more suitable to the present. This is a problem which is being studied by the authorities in the Provinces and the solution proposed by the Cape Education Department will be discussed later in this chapter.

The aims quoted above were probably dictated by the fact that the housecraft schools were started as industrial schools for indigent girls. As such they played a very useful part in eliminating the poor white problem. It will probably be best, then, to examine first in so far

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1. de Villiers Report. Op cit. p.113.

as information is available, the origin of these schools.

3.2. The first industrial girls' schools.

The 1898 report of the Superintendent-General of Education comments on the three industrial schools for boys, in Cape Town, Uitenhage and at Stellenbosch and then goes on. "By the founding of these three schools Industrial Training was provided for boys only: nothing similar was at that time set agoing for girls. In the year now being dealt with, however, two schools to provide indigent girls with a training in domestic work were started, one at Wellington and the other at Graaff-Reinet; and preliminary arrangements were made for one or two others." [1] The table on page 161 gives details of enrolments. The subjects taught at Graaff-Reinet, apart from the usual primary school subjects of reading, writing and arithmetic, were cookery, housekeeping and laundrywork, the stress being laid on the practical subjects. In the early years the girls were taken only to the standard III level academically. At Wellington the practical subjects taught were cookery and laundrywork and the primary school subjects were taken to the standard IV level. It must be pointed out again that the establishment of these and most other industrial schools for girls resulted from the initiative of the Dutch Reformed Church through the agency of the Afrikaanse Christelike Vrouevereeniging. [2]

The 1899 report of the Superintendent-General of Education records that the number of girls' industrial schools had increased to three. [3] The additional school was that at Wynberg which opened on the 15th July, 1898, with an enrolment of five pupils who were taught general domestic work and dressmaking. This was started as an industrial home by the Dutch Reformed Church, the girls being taught housecrafts and dressmaking by private firms in the neighbourhood. The table on page 161 shows that it remained open only until 1904. It taught

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1. 1898 S.G.E.'s report. p.6.
2. Cape Education Commission on Industrial Education 1910 - 1912.
3. 1899 S.G.E.'s report. p.6.

GIRLS' INDUSTRIAL SCHOOLS

	SCHOOL	YEAR																										
		1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
	ADELAIDE																					17	19	36	27	40	40	48	
	GEORGE																					20	31	34	47	40	40		
1	GRAAFF-REINET	30	31	29	19	10	28	32	32	28	33	36	41	70	82	71	72	75	78	56	48	73	70	91	100	111			No figures available.
	GRAHAMSTOWN	*31	28	29	34	43	50	111	31	49	61	67	66	57	29	43	40	46	41	41									
	RIEBEEK WEST																				50	54	55	25	54	41	55	52	
	TULBAGH															32	39	42	41	43	45	43	26	39	45	31	39	30	
	UGIE																								12	10	10	16	
1	WELLINGTON	21	10	34	21	25	22	32	46	51	46	43	41	44	34	35	39	44	47	43	45	47	36	28	38	34	36	25	
1	WYNBERG	✓9	25	23	23	9	10	10																					

* 3rd. QUARTER

✓ 2nd. QUARTER

primary school subjects in the evenings, just as did the Cape Town Industrial Boys' Home, only to the standard 1 level and its failure is attributed to the same circumstances which caused the closing of the Cape Town Industrial Boys' Home. [1]

It was in this same report that the Superintendent-General complained of the "amateurish way" in which these schools were run and said that it would be imprudent to add another single school to the list. One can therefore but note that he had already sanctioned the Grahamstown Housekeeping School which came into existence in 1898 and continued in existence until the second quarter of 1916 when, according to Miss McIvor's inspection report dated 1/2/1917 it "ceased to exist". Miss McIvor was the inspectress of domestic science subjects. For the first year of its existence the school was called the Grahamstown Technical School and it was started by the Anglican Sisterhood to provide girls from the St. Peter's Home who were old enough to benefit by it with an education in cookery, laundry and general housework. [2] At the end of the 1899 inspection report Dr. Muir added a footnote altering the name of the school to the Grahamstown Housekeeping School, "in view of the work undertaken by the school". [3] In 1916 the girls were transferred to the new School Board Centre to obtain their tuition there, according to Miss Margaret McIvor's report for 1916. [4] The work of this school was referred to in the de Villiers Report - "Except for a housewifery department established in 1893 in connection with the Rhenish Girls' School at Stellenbosch and some similar pioneer work in the Eastern Province by the Anglican Sisterhood at Grahamstown, and despite repeated attempts to interest school committees in the subject, domestic science was not taken up in the schools as part of the regular curriculum. In 1904, however, the Cape Education Department published an alternative or modern course for girls' high schools

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1. S.G.E.'s letters 1/215 of 17/10/1898, 2/48 and Inspection Reports 17/12/1898. p.73(a) and 1904 p.28(b). Cape Archives.
2. S.G.E.'s letters 1/213 and Inspection Reports 2/47. Cape Archives.
3. S.G.E.'s Inspection Reports 2/59. Cape Archives.
4. S.G.E.'s Inspection Reports 13/31. Cape Archives.

which emphasized the need for methodising such work as was being done, and appointed a Departmental Instructress in Domestic Economy, who started and taught classes herself until the services of a regular and qualified teacher could be obtained. Progress was naturally slow and in 1908 there were only fifty schools where domestic science was taught in the Cape Colony." [1]

3.3. Departmental Instructors and Instructresses.

The appointment of special instructors and instructresses was one of the steps taken by Dr. Muir in his attempt to implement that portion of the 1891 Cape Education Commission's recommendation that preparatory vocational subjects be introduced into ordinary schools. There was some opposition to the suggestion and so these instructors and instructresses had a three-fold task, to organise the practical work in schools, to train other instructors and to attempt to improve the attitude of the general public towards the introduction of practical subjects into school curricula. [2] Progress was, however, very slow and by 1922 there were only 61 schools which included cookery in the course for girls. [3] Today it would be difficult to find a school which did not include a variety of domestic science subjects in their girls' courses.

3.4. The Cape Committee to investigate industrial schools, 1902. [4]

Dr. Thomas Muir, obviously still very unhappy about the way industrial schools were run, requested Inspector D.W.W. Craib and Mr. W. MacJannett, Superintendent of the Uitenhage Industrial School, to visit the industrial schools, report on each separately giving details of the system of management, finance, teaching staff, equipment, statistics of attendance, instruction and boarding facilities. Then they were to consider the reports as a whole and recommend what type of school should be established in the future, how they should be aided

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1. de Villiers Report. Op cit. p.9.
2. "'n Vergelykende Studie van Beroepsonderwys." Op cit. p.31.
3. Cape Education Department statistics for 1922.
4. Cape Archives. S.G.E. File 13/31. Domestic Schools, 1902.

and managed, what class of children should be admitted, the age of admission and what safeguards should be taken against the admission of unsuitable children. Further they were to suggest the period of residence in the schools, the source of teacher supply and the source and amount of local aid that could be expected. These instructions were issued in a letter to the gentlemen concerned dated 25th January, 1902. He requested a report in about six weeks.

The report was furnished on 7th March, 1902. The committee did not visit industrial schools only because it wished to obtain details about financing and running of other institutions catering for poor children. One such institution was the Children's Home at Kimberley. However details of these other schools will not be given because they are not relevant to this chapter.

The boys' schools inspected were at Uitenhage, Graaff-Reinet, Worcester, Paarl, Stellenbosch, the Salesian Institute in Cape Town and the Cape Town Industrial Home. Of these, the one at Graaff-Reinet is nowhere in statistics shown as an industrial school and so nothing is known about it save what is mentioned in this particular report - that it had 14 pupils, received £66 per year grant from the Education Office, £216 from the Colonial Office, a capitation grant of £18 per annum for 12 pupils and a rent allowance of £66 per year. In view of the comparatively large grant from the Colonial Office, it is supposed that this was a special type of school not to be classified as an ordinary industrial school.

The girls' schools inspected were at Graaff-Reinet, Miss Möllers Home, also at Graaff-Reinet, Wellington and Wynberg. What applies to the boys' school at Graaff-Reinet applies also to Miss Möllers Home. There were 21 pupils in it. There was no grant from the Education Office, £378 per year from the Colonial Office, a capitation grant of £18 per year for the 21 girls and the rent, according to the report, was not known. The grants of £18 per year were not the usual capitation grants paid for ordinary indigent pupils at industrial schools. If the Colonial Office paid for a pupil committed under the Children's Act

the grant was £18 per year compared with £15 paid by the Education Office for an indigent pupil. In any case this school is nowhere listed under the girls' industrial schools in the yearly statistics.

As far as the general body of the report is concerned, what has to be said about the boys' schools has already been set down. In the girls' schools the practice of sending girls out of the school for practical training with employers, as had happened at first at Wynberg, had been discontinued and the committee felt this to be a more satisfactory state of affairs. It said that it much preferred the industrial school atmosphere to that of the apprentice home.

As far as the number of schools was concerned, the committee members felt that there were too many small schools. The boys should be concentrated in, at the most, three schools situated near large population areas, and the girls in not more than two schools similarly situated. It will be shown later in this chapter that this siting has not occurred and is still a bone of contention.

Management should be of a public nature and not sectarian, the committee report reads, and the actual management of the school itself should rest with a supervisor, or superintendent, responsible to a Committee or Board. This superintendent should have the control over the other staff, which should comprise at least a matron, a school teacher and one competent trade teacher for each trade taught in the school. It was implied in the report that it would be difficult to find experienced superintendents in the country and that these would have to be imported. On the other hand there should be no difficulty in finding trade teachers capable of working under the direction of a good superintendent. Government aid towards staff salaries should be given.

The committee found that the revenue, apart from the government aid already given and shown in the table on page 166, came from benevolent people and from the industries carried on in the schools. It varied very greatly from school to school depending on the types of industries and on the quality of the management.

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The other terms of reference dealt with the pupils. The committee recommended that only indigent children should be admitted and the capitation grant should be £15 per annum. Boys should be admitted at ages of from 13 to 17 and girls from 12 to 16. They should be trained for at least three years, the boys not to leave until reaching the age of 18 and the girls 17. To ensure only the admittance of desirable children, the parents or guardians should surrender the children to the management for the required period by signing a proper legal document such as an apprenticeship contract, this to be done only after the children had passed a medical examination.

The report confirmed that general education given in the industrial schools was only of primary standard and was given on three evenings per week.

3.5. The Cape Industrial Education Commission, 1910 - 1912.

At first sight the work of this commission had apparently little effect on the course of events in industrial schools. They are, however, worth noting because in the first place they showed some advance on previous thinking about these schools, and secondly, subsequent events showed that they must have had some influence on future educational action. Consider the first recommendation which was that pupils up to the age of 13 and at least standard V should receive mainly general education and only an element of industrial training. After that standard they should receive some general training but mostly industrial training. This was thinking much ahead of its time. It was shown earlier in this chapter that at Graaff-Reinet the girls went only to standard III level, at Wellington to standard IV and at Wynberg to standard I. This position had improved slightly by the time of the 1902 inspection. Then a few girls at Graaff-Reinet went to standard IV, the position at Wellington was unchanged but at Wynberg one girl actually went to the standard V level. Nevertheless even in 1912, the general education given in these schools was still of primary standard, a position which was not tolerated for very much longer.

The next recommendations of this commission were made in an endeavour to extend industrial education and were to the effect that

School Boards should be encouraged singly or in co-operation to establish new industrial schools. Failing action by the School Boards, other bodies should be stimulated to act. In point of fact, in the case of housecraft schools, this latter action was that taken.

The Commission recommended that the children of parents able and willing to pay fees should not be excluded from industrial schools. It was a long time before this was permitted, presumably because the first industrial schools were established for indigent children. Even in the Consolidated Education Ordinance of 1921, Chapter 9, section 122(a), the following instruction was given. "In the submission to the Superintendent-General of nominations, and in the selection of pupils for admission to an industrial school, it shall be the duty of the managers concerned and of the Superintendent-General, respectively, to prefer children of the absolutely indigent class, who are ordinarily resident at a distance greater than three miles from any existing school ..... ." Nevertheless the same Ordinance gave the Administrator power to establish and maintain trade schools and to make regulations governing the admission, maintenance, training, withdrawal and expulsion of pupils, and to institute a scale of fees. [1]

The next recommendation was also to do with finance and was that grants should be paid for <u>all</u> children in efficient industrial schools. The Commission then said, sensibly, if the economics of the situation are considered, that the schools should be enlarged to accommodate 200 pupils. It was a long time before this occurred and, in fact, in housecraft schools today such an enrolment is not general. The next recommendation was that the manager of the school should have apprentice powers over the pupils. This recommendation was implemented. A typical indenture document is given on page 169. The final recommendation was one which also took many years to implement, that the State should issue special certificates to teachers in these schools. This was discussed in Chapter 11.

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1. Ordinance No.5 of 1921. Chapter 9. Paragraphs 116 and 117.

LEERKONTRAKT.

Dit Kontrakt, GEMAAKT HEDEN den.....DAG van.....

GETUIGT DAT.....

VAN.....in gevolge Acte 15 van 1856, in dat geval gemaakt, heeft, in zijne hoedanigheid als B. J. Pieraa van het kind genoemd, gesteld en geplaatst, en stelt en plaatst, door deze stukken, zijn zoon (hierna genoemd de Leerjongen), oud.....jaar, als Leerjongen bij Wm. H. Jannett in zijne hoedanigheid als ~~Voorzitter~~ Secretaris voor den tijd van de Uitenhaagsche Industrieele School, en bij zijn Opvolger, en als zoodanig vertegenwoordigende het Bestuur van gezegde School (hierna genoemd de Leerbaas), ten einde bij hem te dienen naar de wijze van een Leerjongen voor een termijn van.....jaren, gerekend van..... dag van .....en eindigende op den.....dag van .....gedurende welken tijd gezegde Leerjongen zijne Leerbaas getrouw, ijverig en eerlijk zal gehoorzamen; hij zal zijn gezegde Leerbaas geen schade doen; noch willens en wetens toelaten dat zulks door anderen zal geschieden; ook zal hij niet goederen of effecten van zijn Leerbaas doorbrengen of verkwisten, of ze onwettiglijk uitleenen aan eenig persoon. Hij zal geene drinkhuizen, kroegen, of andere plaatsen door zijn Leerbaas verboden, bezoeken, noch ook zal hij zich absenteeren van den dienst van zijn Leerbaas te eenigen tijd gedurende gezegden termijn, zonder diens verlof, en zal zich, gedurende gezegden termijn, in alle zaken houden en gedragen zoo als een goede en getrouwe Leerjongen behoort te doen.

En de gezegde Leerbaas voor zichzelf, zijne Opvolgers, Erfgenamen en Executeuren, verbindt zich en komt overeen met gezegden Leerjongen dat gezegde Leerbaas gezegden Leerjongen zal leeren en onderwijzen of hem laten leeren en onderwijzen het ambacht van .....of soortgelijk ambacht, naar dat gezegde Leerbaas goed en wenschelijk mocht achten in het belang van gezegden Leerjongen zoo goed als hij kan gedurende gezegden termijn, en zal ook behoorlijk voorziening maken of laten maken voor de opleiding (tot Standaard ~~III~~ VII van het Opvoedings Departement), van gezegden Leerjongen, en voor zijn onderwijs in den Godsdienst, naar het best van zijn vermogen, en zal gedurende al den tijd voornoemd gezegden Leerjongen voorzien van behoorlijke en voldoende voeding en huisvesting, kleeding en wassching, en met alle andere dingen noodig en goed voor gezegde Leerjongen gedurende den gezegden termijn; en ook dat gezegde Leerbaas den gezegden Leerjongen aan geen ander persoon hoegenaamd zal toekennen of overmaken zonder eerst daartoe schriftelijk verlof van den gezegden.....te hebben erlangd.

Onderteekend door ons, de gezegde kontrakteerende partijen,

heden den.....

In de tegenwoordigheid van

L. Jansen S. ..... B. J. Pieraa .....

....

3.6. Another Industrial School

It is from this Commission's report that it is learned that another industrial school for girls was started in Tulbagh in the third quarter of 1912 through the efforts of the Afrikaanse Christelike Vrouevereeniging. At this time during this year the enrolment was 29 although by the fourth quarter this had risen to 32 as shown in the table on page 161. The oldest girl was nineteen and the youngest thirteen, there were four staff members and the girls were taught housecrafts and gardening. Eighteen and a half hours per week were spent in the classroom and the remainder of the time on the practical subjects. The majority of the girls followed a general course in housework but 4 specialised in cookery and 3 in laundrywork.

3.7. The National Advisory Board for Technical Education.

The work of the National Advisory Board for Technical Education has been discussed in several of its aspects in Chapters 1 and 11. In this chapter the concern is with anything that it had to say about the training of girls. In the 1913 report of the Under-Secretary for Education (U.G. 11-'14) there is a full record of a meeting of this Board and much of it had to do with girls. This was the meeting at which "the Board noted with satisfaction that interest was being maintained and progress made with regard to technical education ..... ."[1]

At the third meeting of the Board in Pretoria on 18th July 1913, three memoranda concerning the training of girls in housecraft schools were submitted, one by Miss J.C. van Duijn of the Department of Agriculture, one by Mrs. A.H. Ghent, Principal of the Government Household School at Bethlehem and the third on home industries which need not concern us since home industries as they were then, have now become factory industries and involve training very different from that envisaged for housecraft schools.

The first memorandum was on "Household Science in South Africa". This report is of sufficient importance to be included as Appendix 1. It gives, for example, a picture of conditions in the homes at that

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1. U.G. 11-'14. p.35.

time. According to Miss van Duijn they were bad, particularly in the rural districts. Food was made unpalatable and indigestible through improper cooking. "There is a great lack of industry, simply through the want of knowledge of how to do things." Fruit, vegetables and meat in enormous quantities were being wasted because the principles of canning and preserving were not known. She contended that every woman should have a vegetable garden of her own so that she could stock her pantry for winter use and "instead of having the inevitable 'zout ribbetje' which is not to be despised, and pumpkin, day after day, she would have a greater choice of meat, and especially wholesome green vegetables. It is a lamentable fact that we in South Africa do not sufficiently realise the importance of vegetables in our diet, and there is no doubt that many of our ailments can be ascribed to their absence and therefore to a lack of sufficient mineral, which is so essential to the health and well-being of the body." She went on to report that young, untrained housewives were constantly complaining of the numerous difficulties which confronted them, and with which they were incompetent to deal. Many had expressed their regrets to her that so much of their time had been wasted in what they considered useless subjects such as Greek, Latin, geometry and mathematics, which they maintained could have been employed to better advantage in fitting them for that sphere in life for which most women are destined, namely, that of home-making.

Miss van Duijn acknowledged that a beginning had been made with this type of training in some provinces but that the instruction was of an elementary nature and teachers of household science could not, at that time, be trained in South Africa. She urged that a school for the training of such teachers be established at the earliest opportunity and that elementary courses in household science (cooking, laundrywork, millinery, sewing and hygiene) be introduced into the curricula of all schools.

Some people who are of an age to remember rural life at that time and to whom I have spoken, regard parts of this memorandum as somewhat exaggerated. They admit that the art of preserving green vegetables

was not known but claim that the drying of peas, beans and fruits to a large extent offset this disadvantage. In the absence of adequate cooling facilities the keeping of meat fresh without the use of salt was extremely difficult. Neverthless they concede that there was a need, in many quarters, particularly in the poorer homes, for proper housecraft training. [1]

Before commenting further on this subject, some points from Mrs. Ghent's memorandum on Vocational Training for Girls should be noted. Her theme was that all girls, irrespective of the class from which they came, should have some vocational training. "We are endeavouring, on the one hand, to make clear to our young girls that manual work and labour have an elevating and ennobling influence, while, on the other hand, we discourage these boys and girls who try to become proficient in manual work, by classing them amongst destitute children, the children of "poor whites" or even criminal children. We hear often enough the proverb 'Arbeid Adelt' - 'Work is honourable' - but, if I remember aright, the proverb is always used with reference to the poor whites; I have never yet heard it applied to the richer folk, so that it is used with a mental addition, 'Work is honourable - for the poor, but dishonourable for the well-to-do.'

Now if we continue to associate the idea of poverty with everything of the nature of labour and manual work, we shall never attain our object, which is to impress upon our young girls the conviction that manual work is honourable and not a disgrace." [2] Mrs. Ghent went on to point out that girls were not in their nature lazy nor did they set themselves against scrubbing floors, cleaning stoves and washing clothes. It was the thought that this work stamped a girl as belonging to a certain humble class in the community which caused the damage. Hence Mrs. Ghent's idea that <u>all</u> girls should have some vocational training, and she apparently agreed with Miss van Duijn that the cramming that a

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1. Members of the Saaiman family, formerly of Venterstad district, a prominent farming family at that time.
2. Report of the Under-Secretary for Education 1913. Op cit. Addendum to report.

Marital vocation

girl received for her matriculation examination was so much ballast to be thrown overboard as soon as possible. The training she should receive should train her for her vocation - marriage.[1] Associated with marriage.

The views expressed in the two memoranda would not find a very ready acceptance today. This will be seen when the Steyn Report on 'Beroepsgerigte Onderwys van die Meisie tot en met St. X en/of Matrikulasie' is quoted later. But one supposes that in 1913 very few girls from most classes of South African society did follow a career. There were certainly some, like the members of the family quoted, who took up teaching; some preferred nursing and there were undoubtedly several professions peculiar to womenfolk. It would, perhaps, be reasonable to say, however, that those who followed these professions had the usual human urge to contract matrimony and make the family and the home their full-time occupation. With this in mind, and with the obvious enough fact that these professions still have to be filled, a very strong case can be made out for giving girls a sound, general, formative education. By all means let it include a measure of home economics courses. This can do nothing but good, but, except for those who wish to make a career in a field allied to home economics, specialisation in this direction can be no more justified than in any other. In any case it seems reasonably obvious that the better the general education a girl has had, the better the educational atmosphere in her home is likely to be when she has attained to the status of wife and mother.

The fact that the housecraft high schools have not proved more popular than they have and that the three in the Cape Province are relatively small schools can be attributed, in part, to the fact that many people follow the lines of thought expressed above. There are, of course, other reasons. The first of these is that the schools are far from intensively populated districts, which makes the finding of suitable work difficult; in any case the girls are not prepared, on the whole, to be separated from the social life of the bigger cities

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1. Ibid.

and towns; and it is difficult to find staff for country schools. The second reason is that the stigma of indigency still clings to these schools, however unwarranted this may be.

3.8. Report of the Committee on Industrial Education, 1916. (U.G.9/1917)

In March 1916 the House of Assembly's Select Committee on Drought Distress Relief recommended to the Government "that a thorough investigation be made by one or more competent persons into the existing Industrial Schools with a view to future extension, and to the terms and conditions on which such extension should take place".

Mr Percy Coleman, the technical adviser to the Union Education Department and the Reverend A.D. Luckhoff, Secretary of the Dutch Reformed Church's Poor Relief Committee, were asked to undertake this task. They referred to the 1910 - 1912 Commission on Industrial Education in the Cape and to the 1911 conference called by the Minister in Pretoria and which was discussed in Chapter 1. [1] They decided that a good general definition of industrial education was "Education preparatory to industry and intended for those likely to earn their own living by manual labour." [2] They stated that parents who could afford to pay reasonable fees were still aggrieved at the non-admission of their children to industrial schools and went further than previous commissions in pointing out that the essential problem was to prevent future indigency by providing the most suitable educational equipment for children not yet affected by this limitation. [3] They mentioned the various groups of industrial schools and, for girls in the Cape Province, named the schools at Graaff-Reinet, Wellington and Tulbagh and said that two others were proposed, one at Riebeek West and one at Cradock. [4] In point of fact there is no evidence that a school for indigent girls was started in Cradock but the statistics of the Cape Department reveal that the school at Riebeek West was started in 1917 by the Afrikaanse Christelike Vrouevereeniging. There is more to be

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1. Report of the Committee on Industrial Education. UG 9/1917. p.2.
2. Ibid. p.1.
3. Ibid. p.1.
4. Ibid. p.3.

said about this school later in this chapter; but to continue the findings of this committee, it pointed out that general education was still below the fifth (primary) standard, that the time given to it was very limited and the tuition provided at unsuitable hours. The general education showed little correlation with the practical work and the instructors (instructresses) had no technical or teaching qualifications. [1]

The committee then referred to the Transvaal Grant-in-Aid Commission, which sat from 1914 - 1916, and supported some proposals that had been made by it. The first recommendation was that compulsory attendance throughout the Union should be until the passing of standard VI and a compulsory vocational standard VII course. This compulsory vocational course should be either a one-year full-time or a two-year part-time one. Special arrangements would have to be made for pupils who had not passed standard V at 15 years of age or standard VI at 16. The syllabuses for the vocational standard VII course should have reference to the future work of the pupils and follow the lines of the National Advisory Board's Preliminary Certificates. This should take the place of any other standard VII course in high schools for those pupils not likely to pass the high school course and should be followed by a one-year course leading to the National Advisory Board's Technical Day School certificate. [2] The housewife's course should be a two-year course. [3]

3.9. The Conference on Industrial Education, Bloemfontein, 6th and 7th September 1916.

The Under-Secretary for the Department of Education was the chairman at this conference. Reference will be made here only to those matters relating directly to housecraft training. Other aspects of the report have already been mentioned in Chapter II or will be mentioned in Chapter V.

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1. Ibid. p.3.
2. Ibid. pp. 5-18.
3. Ibid. p.19.

The report, which was given in part (b) of the 1916 report of the Union Department of Education, states that instruction in housecrafts should be provided more widely and brought within the reach of every young woman in the Union. Special instruction should be provided for those in women's industries. For those purposing to become teachers in housecraft schools, a sound education was absolutely vital.

In part (c) of the report the industrial school was discussed. It was stated that classroom instruction should

(i) be flexible and carefully correlated with the practical instruction;

(ii) should fit the pupil to proceed to further technical instruction and lead to the Housewife's Certificate;

(iii) should be given at suitable hours in the day time.

The question of teacher training will be discussed as a separate issue because it is necessary to examine more carefully what is meant by "a sound education" and what was done about it and is now being done.

The contents of part (c) of the report of the Conference show that thinking was becoming, by present standards, more orthodox. It has already been stated that the only general education given at this time was of primary standard and there is no mention anywhere in inspectors' reports that theoretical training allied to the practical home economics subjects was given. The background of the training was, therefore, not of the type that would lead to further, advanced training in the same field. The girls trained by this system were fitted only to go out into somewhat menial work under supervision. The further fact that the general, primary education was given in the evenings after, presumably, a hard day's manual work, was not likely to ensure any adequate attention being given to the classwork and was thus not conducive to any real progress.

It can be concluded that the findings of the Conference were sound in principle and if and when applied, were likely to lead to improvement.

3.10. The Cape Ordinances No. 11 of 1917 and No. 5 of 1919.

These two ordinances were eventually incorporated in the Consolidated Cape Ordinances of 1921. In Chapter IX the Administrator was given power to establish and maintain out of funds voted for the purpose, trade schools, undenominational in character, for the education and training of European children in industrial pursuits and for the management and maintenance of any such school already so established or to be established. He was also empowered to vest such management and maintenance in the Superintendent-General. These schools could also be passed over to a School Board to manage and maintain under the direction of the Superintendent-General.

For such schools, whether managed by the Department or by a board, the Administrator was competent to make regulations,

(a) governing the admission, maintenance, training, withdrawal and expulsion of pupils;

(b) instituting a scale of fees and for the remission of such fees in the case of indigent pupils;

(c) governing the establishment and maintenance in certain approved cases of boarding establishments in connection with these schools, including the provision of scales of charges for boarders and the remission in whole or in part of the boarding charges of indigent pupils.

Provisions were also made for a committee of six members to act as a management committee for a trade school handed over to a board but, to this day, no vocational school falls under a school board and so this clause has no meaning in the present context.

The Administrator was allowed, out of loan moneys voted for school purposes, to grant building loans for any trade school controlled by the Department.

It is thus seen that some progress had been made in the direction of providing trade training for pupils for whom parents could afford to pay fees. [1]

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1. Ordinance No. 5 of 1921. Paragraphs 116-119.

Reading from paragraph 120 onwards, more progress is noted in regard to industrial schools (for indigent children). The Administrator was empowered, for industrial schools already in existence, and for those that might be established, to make grants-in-aid for all approved expenditure upon the following basis:

(i) in respect of interest, rent charges and equipment, for every two pounds spent, a sum of one pound;

(ii) in respect of salaries, the whole of the salaries of teachers of ordinary school subjects, and two thirds of the salaries of principal teachers, instructors and matrons;

(iii) in respect of maintenance of scholars, at rates to be fixed by the Administrator;

(iv) in respect of all other approved expenditure, for every two pounds spent, a sum of one pound;

(v) in respect of books and school requisites (other than furniture and equipment) in all classes up to and including standard VI, the same provisions shall apply,as apply to schools under boards.

The Administrator was also empowered to grant loans to industrial schools approved by the Superintendent-General as conforming to the regulations for the governance of such schools. [1]

The next paragraph marked a step forward in the matter of providing instructors for trade schools and industrial schools. The Administrator was given power to draft regulations for the training of student-teachers for industrial subjects in any trade school or industrial school prepared to undertake the work. It was shown in Chapter 11 that some training did in point of fact take place in the case of domestic science teachers at Adelaide.

Most of the foregoing provisions of the Ordinance marked some progress. The next paragraph was perhaps a little disappointing in that it instructed the Superintendent-General and the managers to

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1. *Ibid. Paragraph 120.*
2. *Ibid. Paragraph 121.*

prefer indigent children, ordinarily distant more than three miles from an existing school and provided they complied as regards age and standard of education, for admission to an industrial school. [1] The attitude of the Administration is well understood but the schools were so small that it is felt that room could have been provided for other children. It must be said that, even in the industrial schools, the Administrator was competent, on the recommendation of the management committee of a school, to admit pupils who were "not entirely indigent", but he had to determine the fees to be paid. [2]

The next paragraphs re-stated the fact that pupils entering industrial schools had to be indentured as an inmate of that school for a period of not less than three years. [3]

Chapter 10 of the Ordinance deals with Industrial Departments. In essence this gave the Administrator the power to establish, in conjunction with boarding houses for indigent children, single teacher industrial departments to provide "education and training in industrial pursuits of indigent European children (of either sex) maintained in any such boarding house, provided that a minimum enrolment of ten pupils can be maintained". [4] It will be remembered that these indigent boarding houses were opened and managed by some charitable body, usually the Dutch Reformed Church. There was a stipulation, however, that this body had no power to appoint, suspend or dismiss a teacher, nor was it permitted to determine the nature of the training to be given in the industrial department. Furthermore the department had to be open to inspection at any time. The teachers or instructors employed in industrial departments were subject to the same conditions of service as those appointed to trade schools. [5]

All approved charges for salary, rent, maintenance and provision of tools and materials for these industrial departments were to be

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1. Ibid. Paragraph 122(a).
2. Ibid. Paragraph 122(b).
3. Ibid. Paragraph 123.
4. Ibid. Chapter 10. Paragraph 126.
5. Ibid. Chapter 10. Paragraph 127 (a) and (b).

borne by the Provincial Revenue Fund, but the revenue derived from the sale of articles produced in them had to be paid into this fund. It was provided that if this revenue exceeded the cost of raw materials supplied in any one year, the Administrator might pay a bonus to the teacher and to the pupils in a department. [1]

Every child maintained in an indigent boarding house, on attaining the age of 16 years or upon passing the sixth standard, had to be indentured as a pupil of the industrial department, or of an industrial department elsewhere, for at least two years, unless specially exempt from this provision by the Administrator. [2]

Paragraph 132 of this Chapter again indicates that only the primary school curriculum was envisaged for these pupils. [3]

The only industrial department created for girls was at Ugie where housekeeping and laundrywork were taught. [4] This opened in 1921 but was closed in 1925 when vocational schools were transferred to the Union Education Department (see table on page 161). By the year 1923 there were 170 indigent boarding houses in the Cape Province, most of them established by the Dutch Reformed Church. [5] They housed 7145 children. [6] The inadequate subsidy received by the Cape Provincial Administration from the Central Government prevented the provision of vocational training for all of these boarding houses (there were five for boys and one for girls [7]) and there was no expansion in industrial education. [8]

3.11. Riebeek West.

In 1917 the Afrikaanse Christelike Vrouevereeniging bought a building known as "The Ark" at the foot of the hill in Riebeek West and established a housecraft school for indigent girls. The question has been asked "Why 'The Ark'?" Because the tale is worth telling and because the housecraft school was for many years also called "The Ark Housecraft School", the story is set down lest it be lost.

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1. Ibid. Chapter 10. Paragraph 129.
2. Ibid. Chapter 10. Paragraph 130.
3. Ibid. Chapter 10. Paragraph 132.
4. "'n Vergelykende Studie van Beroepsonderwys" Op cit. p.34.
5. "The Education of Adolescents in South Africa" Op cit. p.78.
6. "Onderwys in Kaapland" Op cit. p.131.
7. de Villiers Report. Op cit. p.6.
8. Rev. A.D. Luckhoff:Report to the Cape Teachers' Conference in 1922.

In 1862 the farm 'Weltevreden' in the Riebeek West district was owned by a well-known Mr. Christoffel Lombard who had the habit of giving people nicknames. During his lifetime the farmhouse burned down and the local builder, by name Mr. Jan Slabbert, was engaged to rebuild the dwelling. He received the nickname, Noah, for some unexplained reason. While he was busy with the rebuilding, it came to the ears of Oom Stoffel that Noah had bought an erf at the foot of the hill in Riebeek West, on which stood an old reed hut. "So, Noah," he said "you have bought your ark."

Jan Slabbert built a house on his erf and in the course of time it changed hands many times but always kept the name "The Ark". The local school committee eventually bought the house for use as a boys' hostel and such famous figures as Field Marshall Smuts and Dr. D.F. Malan spent some of their schooldays in it. It was this building that was eventually purchased by the Afrikaanse Christelike Vrouevereeniging and used as The Ark Housecraft School.

It was taken over as a subsidised institution by the Union Education Department in 1925 but eventually in April 1930 the Union Government took over the school as a State school and converted it to a housecraft school running the two-year post-primary course which will be described later in this chapter. The building was in a dilapidated condition and at the end of 1930 was enlarged and repaired by the Department of Public Works. Even with the alterations the maximum number of pupils that could be accommodated was 50.

In 1932, when the enrolment was 48, the staff numbered four and it is interesting to note from the school journal how the time was divided between subjects and teachers.

Miss Perkins	Miss Dreyer	Miss Hollebrands
Cookery 20 hours	Dressmaking 20 hours	Laundrywork 12 hours
English A 1½ hours	Physiology and Hygiene 3 hours	Housewifery 8 hours
Arithmetic 1½ hours	Needlework (Demonstration) 1½ hours	Arithmetic 1½ hours
Cookery (Theory)	First Aid and Home Nursing 1 hour	Demonstration 1 hour
Cookery (Demonstration) 1 hour		Afrikaans 3 hours

Mrs. Squires (Principal)

Civics	*3 hours*
English	*1½ hours*
Singing (evening)	*2 hours*

Electric light was installed only in 1934!

In 1938 a three-year course was introduced, and in the following year a new building was started and repairs to the existing buildings undertaken in January. The new building was to provide extra classrooms, a new kitchen, a dining room, a store and a new office.

In 1944, in common with other vocational schools, the name was altered by the addition of High and now became The Ark Housecraft High School.

The first standard VI class was taken in in 1953 - at the same time as other high school courses were extended. This, together with the slow but steady increase in yearly enrolments, and the beginning of a standard IX class in 1957, made further extensions necessary and a new hostel was begun in 1960 and a new school building in 1962. Further extensions comprising a third hostel for 96 girls, a school hall and two extra classrooms, together with a new sports field, are shortly to be undertaken. The school is today the biggest of the three in the Cape Province and is likely to grow still more. At the time of the tercentenary celebrations the school was renamed The Maria van Riebeek Housecraft High School and so to some extent severed its link with its interesting past. [1] *(See the table on page 183 for the more recent enrolment figures.)*

3.12. Housecraft High School, George.

This school was started on 1st. July, 1917, by the Afrikaanse Christelike Vrouevereeniging with an enrolment of 15 indigent girls for whom the Province paid £16 per annum per head, £50 towards the salary of the Superintendent, Miss N. Fourie, and £24 per annum for rent. From 1st. October, 1917, an assistant was engaged and £40 per annum was paid by the provincial authorities towards her salary.

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1. *Salient facts translated from "Skool Joernaal, Huishoudskool, Riebeek Wes", Jan. 1932 - March 1968.*

HOUSECRAFT HIGH SCHOOLS

CAPE PROVINCE

SCHOOL	YEAR																																																
	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
ADELAIDE	36	46	46	46	54	52	50	51	47	51	89	100	112	111	110	100	99	88	93	68	63	75	78	84	70	65	70	70	73	62	69	87	100	109	110	122	114	107	93	78	103	113	108	87					
GEORGE	16	42	48	54	46	52	55	50	54	55	43	57	58	57	75	92	89	94	92	87	67	97	97	94	108	116	120	115	129	141	130	133	142	138	142	160	178	183	176	158	164	167	183	203					
KNYSNA										9	32	61	54	42	72	61	64	60	59	59	53	23	24	63	53	58	48	46	62	59	60	45	62	58	58	46	36	BECAME CHILDREN'S ACT SCHOOL	–	–	–	–	–	–	–					
RIEBEEK WEST				47	47	43	49	46	45	41	45	46	41	59	75	60	54	77	77	74	76	66	57	75	80	75	78	80	81	94	127	131	144	161	168	190	215	233	239	228	216	205	223	252					

In March, 1918, the Reverend J.A. Beyers, who was the correspondent for the school and therefore, presumably, the chairman of the management committee, wrote to say that they had secured larger and more suitable premises but that the rent would be £75 per annum in future. The Province agreed to pay this.

Details of the enrolments are given on page 161 and on page 183 so that it is readily seen that up to the time of take-over by the Union Education Department this was a small school. It followed the usual pattern of providing primary school education and practical housecraft training until after the transfer when, just as in the case of the school at Riebeek West, more advanced courses were gradually introduced. It is not necessary to repeat the details. [1]

Today it is the second largest housecraft high school in the Province with an enrolment of 203 pupils but the future of this school is somewhat uncertain. Two years ago the Department of Defence requested the Provincial Administration to transfer the school buildings to it because it wished to start a military training establishment for young women. The Administration agreed and decided to purchase more ground adjacent to the P.W. Botha Technical High School and build a new housecraft high school to function as a department of the technical high school. The housecraft rooms (cookery, laundrywork, needlework, housewifery) have been provided together with the extra classrooms required and a hostel for 100 girls. It is anticipated that about 100 local girls will continue to attend the school. This will be the first time that technical high school boys and housecraft high school girls have shared a campus; it has occurred in many places in the case of technical high school boys and commercial high school pupils. There is a difference, however. The restriction at present imposed by the housecraft high school syllabuses is that matriculation exemption cannot be obtained by following the senior course. This is because mathematics is not taught beyond the standard VI level. The possibility will exist in the future for girls who wish to matriculate to take this

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1. S.G.E.'s file 1/1722. Cape Archives.

subject in the technical department of the school. It is even envisaged that some girls may wish to take technical courses. This will be discussed later in the chapter when the Steyn report is examined.

3.13. Housecraft High School, Adelaide.

The first buildings which were erected on the site of the present school were built in 1905 as a hostel for boys and girls attending the local high school. They served this purpose for eight and a half years. A typhoid epidemic then occurred in the hostel, apparently caused by a shortage of good drinking water and an inefficient sewerage system, and the hostel was evacuated in June 1914.

There was some talk, thereafter, of converting the building to a hospital but nothing came of this. The Rev. J.H. van Wyk then began to persuade the educational authorities to open a Housecraft Training Centre in this building. By now the building had been unoccupied for a year and was falling into a bad state of repair. Sir Frederick de Waal, then Administrator of the Cape Province, was favourably disposed towards the Rev. van Wyk's proposition and eventually, in 1915, a training centre for teachers of housecraft subjects was opened.

The course was a five-year one and attracted so many applicants that by 1918 it became necessary to build additional classrooms. The corner stone of this new building was laid on 30th. October, 1918 by Sir Frederick de Waal.

For some unexplained reason the Education Department, after the students had completed the course, refused to issue a professional certificate. Naturally the number of students fell and the plan to train teachers in this institution was abandoned and the buildings were used as an industrial school for girls. The enrolments are given in the tables on pages 161 and 183. The school was subsidised on the pound for pound basis and the principal was, to a great extent, dependent on the financial backing of the public of the neighbourhood and of the school committee. The financial position became desperate: the expenditure often exceeded the income.

In 1920 the Rev. J.H. van Wyk, the founder of the school, was appointed as Inspector of Church Hostels by the Education Department. His successor, the Rev. A.H. Naude, was chairman of the school committee until 1932. Under his wise and sympathetic guidance the school made good progress.

During the year of transfer of vocational schools to the Union Education Department, 1925, the school had an overdraft of £400 and as a result of this an appeal was made to that department to take the school over as a State institution. This occurred in April 1926 and it became known as the Housecraft School, Adelaide. An advisory committee was appointed, as was done in other State vocational schools.

In 1929, £18 000 was allowed by the Government for the erection of a new block of classrooms and housecraft rooms, which were taken into use in 1937 and allowed an enrolment of about 115 pupils. [1] *The table on page 183 shows that the school has had somewhat varying enrolments since 1937. To some extent this is attributable to the rather remote geographical situation of Adelaide. It is inconveniently situated for arrival or departure by train - the manner in which many pupils have to come and go. In addition the hostel buildings are in a very bad state of repair and very outmoded. The ironing of clothes, for example, has to be done by sad irons heated on coal stoves because a power supply of electricity cannot be safely supplied to this building.*

However, just as in the case of the George Housecraft High School, an entirely new school is to be built on the campus of the local technical high school, which school is also to be rebuilt. What has occurred is that a number of properties bordering on the technical school site have been acquired by the Provincial Administration and the architects have submitted sketch plans of a completely new combined technical and housecraft high school, which will be known as the Piet Retief Technical High School. The only portion of the existing buildings which will remain will be the hall, which is a new building, and will be enlarged.

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1. All details supplied by Lady Principal from school records.

An opportunity will be afforded girls who wish to matriculate or follow a technical course to take the necessary subjects in the technical high school department of the school.

The enrolments of each department will, it is anticipated, remain at about their present level, that is to say, 200 boys and 150 girls. This will make the combined school a much more economic unit as far as the use of academic staff is concerned than has been the case in the past.

3.14. Housecraft High School, Knysna. [1]

This school was established in 1936 to provide vocational training for the poorer type of girls who still remained in that neighbourhood. Unlike the other housecraft schools it was established not by the Province but by the Union Education Department, after a committee had investigated the educational needs of the area. The table on page 183 shows that it remained as a housecraft school until 1963 when, because of the dwindling enrolments and because of the increasing need for a girls' school to be administered under the provision of the Children's Act, it was converted into a School of Industries.

3.15. The Second National Advisory Board for Technical Education.

The first National Advisory Board for Technical Education was constituted in September, 1912, and held its first meeting in Pretoria in November 1912, its second meeting in Cape Town in February 1913, and a third meeting in Pretoria in July 1913. Reference to this third meeting has already been made in paragraph 3.7. of this chapter. In connection with housecraft schools there is nothing further to report of the work of this particular board. In November 1915, however, a second board was appointed for a period not exceeding three years. The Board consisted of the Under-Secretary for Education as chairman, the four directors of education from the Provinces, Professor H. Bohle, Dr. S.G. Campbell, Mr. E.J. Cattell, Dr. G.S. Corstorphine, Mr. W.A. Hendrie, Rev. D.J. Pienaar and Mr. A.B. Reid.

The work of this board was conducted to a great extent through

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1. *Information supplied in personal interview with Dr. Opt'Hof, Secretary of Cultural Affairs and at one time Secretary for the Department of Education, Arts and Science, on 5th. August, 1970.*

two examination committees, a technical examinations committee and a commercial one. The principals of certain technical colleges were co-opted to these committees, Mr. B.M. Narbeth of Natal Technical College (on both committees), Mr. W.H. Hemer of the Cape Technical College (on both), Mr. A. Seymour-Hosley of the Pietermaritzburg Technical College (on both), and Mr. A. Peacock of the Free State Technical College (on the technical examinations committee).

The work of the board in connection with technical examinations has been discussed in Chapter 11. With regard to housecraft education the technical committee recommended a course approximately parallel with the Preliminary Technical Certificate and hence to take one year full-time study after the successful completion of the standard VI examination (as a minimum requirement). Because the course was intended for future housewives it was to be known as the National Housewife's Course and the certificate to be issued as the National Housewife's Certificate. The subjects were: Civics, an official language, cookery, laundrywork, house management and accounts, needlework, home dressmaking and hygiene and physiology.

This represented a serious attempt to lift the level of housecraft education from the primary level. Unfortunately no schools from the Cape Province entered candidates for the examination.[1] It will be remembered from the previous chapter that the Under-Secretary for the Union Education Department had pointed out in his 1918 report that his department had no wish or power to compel provincial authorities to enter their pupils for these examinations but hoped to offer guidance in the arrangement of work by "approving a suitable selection of general papers as forming a group-course". The board took into account the school report on a pupil's work during the year in assessing the results. It wished to discourage entries for examinations in one or more isolated subjects but to encourage the organising of well-balanced courses.[2]

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1. Report of the Under-Secretary for Education for 1917. UG 17'1919. pp. 58 and 61.
2. 1918 Report of the Union Education Department. (UG 8, 1920) p.27.

3.16. The 1919 Annual Report of the Union Education Department.

A portion of this report is given in some detail because of its significance in showing the way the Union Education Department was thinking about housecraft education. "The subject of housecraft is undoubtedly attracting an increasing number of students in certain centres; it is, however, doubtful if it is receiving the attention it deserves. In the opinion of some, at least, the major portion of the work throughout the Union needs some revivifying influence. So far as the elementary schools are concerned, such domestic science subjects as are included in the curriculum are too frequently considered as subsidiary to class examination subjects, and, as results obtained do not influence promotion or the granting of certificates, a quite understandable apathy has been manifested towards them by both principals and pupils. Such an attitude is discouraging in the extreme to teachers in these subjects as well as to those others who had hoped to see cookery and needlework in the elementary school leading to a complete course in domestic science through the secondary school and special institutions ..... ." [1] The report then went on to mention the question of teachers' qualifications and said that the Department had attempted to assist in the work of unification of standard by the institution of a Teachers' Diploma in Domestic Science. "It is hoped by this means to render this branch of education more attractive as a profession and to stimulate interest in the subject generally." [2]

3.17. Teachers' Examinations.

(a) An Early Example. 1929.

Admission to the training course was restricted to candidates with Matriculation (or equivalent) Certificates. The course of study was of three years' duration and the passing of the examination conferred upon the candidate a provisional certificate. After one year's satisfactory teaching experience the National Domestic Science Teachers' Certificate was awarded. Examinations were held twice yearly (in June and November)

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1. 1919 Report of the Union Education Department. (UG 57,1920) pp. 58-69.
2. Ibid. pp. 58-69.

and in all written papers, except the language B paper, the pass mark was 50%. The pass mark in language B was 30%. In practical tests the pass mark was 60%. A First Class Certificate was awarded to candidates who obtained 70% of the total average mark. Entries were accepted for single subjects and successes were cumulative.

Candidates had to satisfy the examination requirements in all the following subjects:-

1. Language A or B. (A 3-hour paper for A and a $1\frac{1}{2}$-hour paper for B).
2. Educational Psychology (A 3-hour paper).
3. Theory of Teaching (A 3-hour paper).
4. Practical Teaching. (In Cookery and one other subject, each lesson to be of 2 hours duration, one of primary and one of secondary standard).
5. Domonstrating (An Adult Demonstration of one hour's duration in High Class Cookery).
6. Science (One 3-hour paper and one 4-hour practical test).
7. Hygiene and Physiology (A 3-hour paper).
8. First Aid and Home Nursing (Syllabuses and examinations as prescribed and conducted by the S.A. Red Cross Society or St. John Ambulance Association).
9. Cookery, Theory and Practice (A 3-hour paper in theory and a 3-hour practical test).
10. Dressmaking, Theory and Practice (A 3-hour theory paper and a 4-hour practical test).
11. Needlework, Theory and Practice (A 2-hour theory paper and a 3-hour practical test).
12. Laundrywork, Theory and Practice (A 3-hour theory paper and a 3-hour practical test).
13. Housewifery, Theory and Practice (A 3-hour theory paper and a 3-hour practical test).
14. Upholstery (practical specimens only shown for examination purposes).

In addition candidates were permitted to take the following subjects, and successes were endorsed on the Certificate:-

(i) Millinery, Theory and Practice (A 2-hour theory paper and a 3-hour practical test).

(ii) Bookkeeping (A $2\frac{1}{2}$-hour paper).

The practical tests were conducted by the Inspectress of Domestic Science in the six weeks preceding the written examinations.

Candidates were urged to become bilingual. If they wished they

could teach one practice lesson in Afrikaans and one in English. In that case the pass mark was 50% in each lesson. If both lessons were taught in the same language the pass mark was 60% in each lesson. Candidates who demonstrated their ability to teach in both media had their certificates endorsed to that effect. [1]

(b) The Present Examination (1968).

The admission qualification and the length of the course are unaltered from the above. However candidates must study at one of the following authorised institutions:-

The Johannesburg Teachers' College for Home Economics.
The Cape College for Advanced Technical Education.
The Natal College for Advanced Technical Education.
The Pretoria College for Advanced Technical Education.
The Huguenot College, Wellington.

In order to qualify, candidates are required to complete and pass courses in the following subjects of Groups 1, 11 and 111 :-

Group 1.

English A or B (written). (3-hour paper in Second Year)
Afrikaans A or B (written). (3-hour paper in Second Year)
English (Oral) (At end of course)
Afrikaans (Oral) (At end of course)

Group 11.

Educational Psychology (3-hour paper in Third Year)
History of Education (3-hour paper in Third Year)
Educational Principles and Teaching Methods (3-hour paper in Third Year)
School Hygiene and First Aid (2-hour paper in First Year)
Physiology (3-hour paper in First Year)
Methods of Teaching Home Economics. (3-hour paper in Third Year)
Practical Teaching and Chalkboard Work. (At end of course)

Group 111.

Cookery and Nutrition (Theory and Practice) 1 & 11. (3-hour papers in Second and Third Years)
Needlework (Theory and Practice) (3-hour theory in First Year. Practical test in Third Year)
Dressmaking (Theory and Practice) 1 & 11. (3-hour theory in Second and Third Years. Practical test in Third Year)
Home Management (Theory and Practice) including Upholstery (Practice)
Laundrywork (Theory and Practice) (2-hour theory in First Year. Practical Test in Third Year)
Science 1. (3-hour paper in First Year)
Science 11. (3-hour paper in Second Year)

As before, a first-aid certificate must be obtained from a recognised examining body.

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1. Handbook G (Section 111) National Domestic Science Teachers' Certificate.

200 hours of teaching practice must be done during the course including two weeks at schools during the second and the third years and 45 criticism lesson hours. [1]

Certain subjects are common for all types of teaching certificates, for example, all the subjects in Group 1 and the first four subjects of Group 11. These are externally examined and moderated. The Departmental Inspectress of Home Economics controls the practical tests and the practical teaching and chalkboard work.

It can be seen then that the old five-year training scheme which was introduced at Adelaide was replaced by a three-year course but that the minimum entrance qualification was raised to a senior certificate level. The purpose of the five-year scheme had been primarily to train instructresses for the one-teacher boarding establishments, [2] whereas the schemes introduced by the Union Education Department, aimed at training teachers of domestic science subjects. In the nature of the course there would appear to be a subtle difference between instructress and teacher, the course for teachers being a much more professional type of course including educational psychology and subject methods. The latest course includes even more professional subjects. When the universities eventually take over the control of all secondary teacher training this tendency may well be taken further.

3.18. Pupils' Examinations.

3.18.1. General

It has been shown in Chapter 11 and in the present chapter that for many years the general education provided in the industrial schools was of primary standard, in the very early years only to standard 111 or 1V level and gradually rising in later years to standard V1. It was shown also that the National Advisory Board had introduced a Housewife's Certificate course of standard V11 level in an endeavour to raise the level of the training. In the 1923 Education Commission's

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1. Handbook. The National Teachers' Diploma. 1968. Government Printer, Pretoria. pp.7,8,9.
2. Education Administration Commission. Second Report. UG 19'24. Op cit. p.5.

second report it is stated that improved provision for primary education had now made it possible for the Cape Department to lay down the rule for the majority of the industrial or trade institutions that pupils might not enter unless they had passed standard VI and were at least 14 years of age. "The pupils thus form a homogeneous group and are able to take a three years' course for the Cape Province Junior Secondary Certificate (in a modified form) together with training in some specific craft." [1] There were a few schools, "special schools", of the old type, preserved for those who were unable to benefit from the ordinary primary course and complete it in a reasonable time. Such pupils were admitted if they failed to pass standard IV or were over 16 years of age. [2] There was also the single-teacher industrial department at Ugie where the admission requirement was the passing of standard VI or the attainment of the 16th year. [3]

There is no indication that the housecraft schools pursued the three-year course leading to the modified Cape Junior Certificate. In fact, referring back to the extracts from the school journal of the Riebeek West school, it was only in 1930 that a two-year course was introduced, and that under the auspices of the Union Education Department.

3.18.2. 1923 Examinations.

The pattern of the one-year course for the Housewife's Certificate in 1923 is outlined below:-

1. The school year was to be of 700 hours duration of which a pupil who wished to offer herself as a candidate for the examination had to attend at least 600 hours.

2. The examination subjects were:

(a) At least one from English or Afrikaans. (A 1½-hour paper in each)
(b) Civics. (A 1½-hour paper)
(c) Housewifery and Accounts. (A 2-hour paper)
(d) Cookery. (A 2-hour paper)
(e) Hygiene and Physiology. (A 2-hour paper)

3. Practical tests in Plain Needlework and Home Dressmaking. (3-hour tests)

4. During the two months preceding the examination an inspection was

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1. Ibid. p.6.
2. Ibid. p.6.
3. Ibid. p.6.

held during which marks were assigned for tests in Practical Cookery, Practical Housewifery and Laundrywork.

5. School reports were taken into account.

6. Additional subjects might be offered and if candidates were successful in them, these were recorded on the certificate.

7. It was suggested that the division of time should be 600 hours to practical work and 100 hours to theory. The practical work time should be divided:-

Plain Needlework	80 hours
Home Dressmaking	100 hours
Practical Cookery	240 hours
Practical Housewifery	100 hours
Laundrywork	80 hours

8. Each pupil had to keep a "Housewife's Personal Record Book", which was a record of each day's work. This had to be signed weekly by or on behalf of the principal and the book had to be available for inspection.[1]

It is very easy to criticise this course as having far too little general, formative subject matter in it. Apart from the languages, civics and the physiology, everything else is practical, bread and butter, material. However it must be remembered that this was a first attempt to break away from primary education and, furthermore, in a one-year course, to prepare girls to earn a living.

3.18.3. 1940 Examinations.

The 1940 course in domestic science showed a little improvement in that it offered a standard VII and a junior certificate course and these could be followed by a one-year specialised course. The details are :-

1. Standard VII Course: Five subjects selected as follows:-

Group I (i) Afrikaans A or English A.
(ii) Afrikaans A or B or English A or B, whichever was not taken on the A grade above.

Group II Three subjects from :-

(iii) Cookery (Theory and Practice)
(iv) Housewifery (Theory and Practice)
(v) Laundrywork (Theory and Practice)
(vi) Needlework (Theory and Practice)
(vii) Physiology and Hygiene

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1. Information extracted from the Handbook of Syllabuses for the National Housewife's Certificate, 1923.

Course reports were required on the practical work and the practical tests were internally conducted.

Non-examination subjects were Singing and Physical Education.

11. National Junior Certificate Course: Five subjects selected from:

Group 1. (i) Afrikaans A or English A.

Group 11. One subject from :-

(ii) Afrikaans A or B or English A or B, whichever was not taken in Group 1.
(iii) Civics
(iv) Physiology and Hygiene

Group 111. Three subjects from :-

(v) Cookery (Theory and Practice)
(vi) Laundrywork (Theory and Practice)
(vii) Dressmaking (Theory and Practice)
(viii) Housewifery (Theory and Practice)
(ix) Child Care (Theory and Practice)
(x) Agricultural Science (Theory and Practice)

Non-examination subjects were Singing and Physical Education.

Specialised Courses (for girls with Junior Certificate)

(i) Certificate of Tea Room Cooking and Waiting.
(ii) Certificate of Home Management.
(iii) Certificate of Nursery Nurses.
(iv) Specialised Dressmaker's Certificate.

The details of this course have not been given, except for the subjects, the purpose being to show that virtually the only improvements were to spread the course over two years and to make some measure of bilingualism compulsory. The addition of a third year's specialisation, too, was, at least, a forward step in better preparation for entry to the world of wage earners.

3.18.4. 1944 Examinations.

The examinations introduced in 1944 showed several marked improvements. In the first place a senior certificate course of two years' duration was introduced as an alternative to the specialised courses following junior certificate. The non-examination subjects were increased by the addition of religious instruction and rather more time was allocated to the general education subjects. The details are:-

Of the 25-hour week, 9½ hours were to be devoted to general subjects:- Afrikaans 2½ hours, English 2½ hours, science 1½ hours, religious instruction ¾ hour, singing ¾ hours, and physical education 1½ hours.

The domestic science subjects were to receive:- Cookery 4 hours, needlework and dressmaking 3 hours, child care 3 hours, laundrywork 2 hours, housewifery 3 hours and first aid and home nursing ½ hour. This means, of course, that of the 700 hour year, practical work would still claim about 400 hours.

Standard Vll Course. Six subjects from:-

Group 1. First official language A.

Group 11. Second official language A or B, or French, German, Portuguese or a Bantu language.

Group 111. Science or Physiology and Hygiene.

Group 1V. Three subjects from :-

Cookery, Housewifery, Laundrywork, Needlework.

In addition the pupil had to pass the examination in First-Aid of the St. John Ambulance Association or the South African Red Cross Society or die Noodhulpliga.

National Junior Certificate Course. (for pupils with a pass in standard Vll.)

Six subjects from :-

Group 1. First official language A.

Group 11. Second official language A or B, or French, German, Portuguese or a Bantu language.

Group 111. Science or Physiology and Hygiene.

Group 1V. Three subjects from :-

Child Care, Cookery, Dressmaking, Housewifery, Laundrywork.

In addition the pupil had to have passed the examination in First-Aid of the St. John Ambulance Association or the South African Red Cross Society or die Noodhulpliga.

The National Senior Certificate Course. (A 2-year course for pupils with the Junior Certificate)

Six subjects from :-

Group 1. First official language A.

Group 11. Second official language A or B, or French, German, Portuguese or a Bantu language.

Group 111. Science

Group 1V. Three subjects from:-

Child Care, Cookery, Housewifery, Laundrywork and Needlework and Dressmaking.

The improvement in the courses is shown by the insistence on three general education subjects, namely, two languages and a science subject and the restriction of domestic science subjects for examination purposes to three.

For candidates who did not wish to follow a two-year post Junior Certificate course, specialised courses were offered:-

Specialised One-Year Courses. (For candidates who had passed Junior Certificate.)

(a) Assistant Matron's Certificate	(Two theory papers of 3-hours each and 2 internal practical examinations.)
(b) Commercial Demonstrator's Certificate	(Two theory papers of 3-hours each and 2 internal practical examinations.)
(c) Dressmaker's Certificate	(One 3-hour theory paper, one 3-hour speed test and 2 internal practical examinations
(d) Homemaker's Certificate	(Two theory papers of 3-hours each and 2 internal practical examinations.)
(e) Nursery Helper's Certificate	(Two theory papers of 3-hours each and 2 internal practical examinations.)
(f) Seamstress's Certificate	(One 3-hour theory paper, one 3-hour speed test and 2 internal practical examinations
(g) Steam Laundress's Certificate	(Two 3-hour theory papers and 2 internal practical examinations.)
(h) Tea Room Assistant's Certificate	(Two 3-hour theory papers and 2 internal practical examinations.) (1.)

3.18.5. 1965 Examinations

The next course to be considered will be that of 1965 because it showed another significant change by the introduction, from the junior certificate level, of an A and a B course. The A course included some commercial subjects and the B course remained a purely home economics course. In addition provision is made for a standard VI course because these standards were transferred to high schools in 1953.

The National Standard VI Certificate Course.

The certificate was awarded to candidates who passed in four subjects selected as follows:-

Group I. First official language A.

Group II. Second official language A or B.

Group III. Two of the following subjects:-

Arithmetic, Physiology and Hygiene, Cookery, Needlework, Housewifery and Laundrywork.

Non-examination subjects were religious intruction, singing and appreciation of music or drama and speech training, and physical

(1.) Details of the two foregoing courses were extracted from the handbooks of National Domestic Science Syllabuses and Examinations for 1940 and 1944 respectively.

education.

Full-time pupils followed a course which included all of these subjects. The time distribution per week was:- Languages $3\frac{3}{4}$ hours each, arithmetic 3 hours, physiology and hygiene $2\frac{1}{4}$ hours, cookery $3\frac{3}{4}$ hours, needlework $3\frac{3}{4}$ hours, housewifery and laundrywork $3\frac{3}{4}$ hours, religious instruction $\frac{3}{4}$ hour, singing and appreciation of music $\frac{3}{4}$ hour, physical education $1\frac{1}{2}$ hours - a total school week of 27 hours. It will be seen that approximately one half of the time was now devoted to general education subjects, which was an improvement on the earlier courses.

The National Standard V11 Certificate Course.

The certificate was awarded to candidates who passed in five subjects selected as follows:-

Group 1. First official language A.

Group 11. Second official language A or B.

Group 111. Three of the following subjects:-
Arithmetic, Physiology and Hygiene, Cookery, Needlework, Laundrywork.

Housewifery was taken as a non-examination subject together with religious instruction, singing and appreciation of music or drama and speech training, and physical education.

Full-time pupils took all the subjects. The time distribution was almost identical to that in the standard V1 course, except that laundrywork was given for 3 hours per week and housewifery for $1\frac{1}{2}$ hours per week, thus increasing the school week by $\frac{3}{4}$ hour.

At this stage girls were allowed to choose the A or B course for the next three standards. The non-examination subjects remained the same as in standard V1 and were given the same time allocation in all the other courses.

The National Junior Certificate Course.

Full-time pupils took all the subjects in their stream but were required to pass in six of them selected as follows:-

Course A.		Course B.	
Group 1.	First official language A. (3¾ hours/week)	Group 1.	First official language A. (3¾ hours/week)
Group 11.	Second official language A or B. (3¾ hours/week)	Group 11.	Second official language A or B. (3¾ hours/week)
Group 111.	Commerce or Commercial Arithmetic (3 hours/week) and Typewriting (3¾ hours/week)	Group 111.	Four of the following subjects:- Cookery (3¾ hours/week) Needlework - Dressmaking (4½ hours/week) Housewifery (3¾ hours/week) or Commercial Arithmetic (3¾ hours/week) Physiology and Hygiene (4½ hours/week) Laundrywork (Non-examination subject) (1½ hours/week)
Group 1V.	Cookery (3¾ hours/week) Needlework-Dressmaking (3¾ hours/week) Housewifery (3 hours/week) Laundrywork (Non-examination subject) (1½ hours/week)		

The school week was thus further extended to 28½ hours.

The National Intermediate and the National Senior Certificate Courses.

Full-time students took all the subjects in their stream but were required to pass in six of them selected as follows:-

Course A.		Course B.	
Group 1.	First official language A. (3¾ hours/week)	Group 1.	First official language A. (3¾ hours/week)
Group 11.	Second official language A or B. (4½ hours/week)	Group 11.	Second official language A or B. (4½ hours/week)
Group 111.	Cookery and Nutrition (4½ hours/week) Needlework - Dressmaking (4½ hours/week) Commerce (3¾ hours/week) Typewriting (4½ hours/week)	Group 111.	Cookery and Nutrition (4½ hours/week) Needlework - Dressmaking (4½ hours/week) Institutional Management (4½ hours/week) Physiology and Hygiene (3¾ hours/week)

There was, therefore, no choice of subjects.

A five-subject certificate was awarded to a candidate who sat for six subjects, obtained 40% in each of four subjects, at least 35% in a fifth subject and a grand total of 240 marks in the six subjects, provided that both official languages were included in the five subjects.

Subject successes were cumulative but, except as in the above paragraph, to obtain a certificate all six subjects had eventually to be passed.

The system of specialised subjects had been done away with, but

for pupils seeking employment in certain institutions National Housemother Certificates were, and are, issued. The conditions are:-

(a) The National Housemother's Certificate (Intermediate).

This is issued to a pupil who, in the intermediate examination, passed in at least three domestic science subjects. Successes in other subjects are stated on the certificate.

(b) The National Housemother's Certificate (Senior).

This is issued to a pupil who, in the senior certificate examination passes in at least three domestic science subjects. Other subject successes are stated on the certificate.

These certificates are of use to girls seeking employment in school hostels and similar institutions. [1]

3.19. The 1925 Transfer.

Most of what has to be recorded of the reasons for and the effects of the transfer of vocational schools from the Provinces to the control of the Union Education Department has already been written in the previous chapters. As far as the housecraft schools were concerned the smaller schools were closed as being uneconomical and only those at Adelaide, George and Riebeek West were kept in existence. (The school at Knysna was opened later.)

The introduction of a system of National Examinations, as described in the previous paragraphs, gradually raised the standard of what were industrial schools until in 1944 they received the appellation "Housecraft High School"; they were permitted to offer a senior certificate course from 1957. Academically, therefore, the transfer was of benefit and brought with it a uniformity of standard which is, generally speaking, desirable if not taken to such extremes that initiative is killed and local requirements not met.

The other benefit obtained was that more money was available for much needed renovations and extensions, and for the modernisation of equipment. As the table on page 183 shows, the schools that continued

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1. All details of the 1965 courses obtained from the handbook of syllabuses and examinations in Home Economics, 1965.

in existence gradually grew to reasonably sized institutions. They were recognised as vocational schools and enjoyed the protection of the various Acts, until the latest one in 1967, just as did the technical high schools. The fact that they did not grow into much larger institutions was a fact that had worried the Department of Education, Arts and Science in recent years. The introduction of some commercial subjects was an endeavour to modernise the courses and make them more acceptable to the girls of today. This has not proved to be the case and the fact that they were removed from the protection of the 1967 Act was an indication that the Government wished the Provinces to feel free to develop these schools as local circumstances suggested, with no legal restrictions to hinder this process.

3.20. The 1968 Re-transfer.

Some indication of the way the Cape Provincial Authorities are viewing this problem has already been given in the discussions of the Adelaide and George Housecraft High Schools. It has been decided to continue specialised housecraft education. It is felt that for certain types of girls (the slightly below average intelligence group) these schools still serve a useful purpose and there is little doubt that they will continue to do so. It is anticipated that the school in Riebeek West will grow a little more. It has been decided to maintain the general pattern of the existing courses although in some cases the syllabuses of the Cape Education Department will be used. Following Cape Provincial practice, examination are internal except in standard X. The non-examination subjects are as at present, singing, physical education and religious instruction. Vocational guidance is given in class groups in standards VI - VIII and individually thereafter. Details of the examination subjects are:-

Standard VI

1. First official language A. (Cape Syllabus)
2. Second official language A or B. (Cape Syllabus)
3. Physiology and Hygiene. (Existing Syllabus)
4. Mathematics. (Cape Syllabus)
5. History. (Cape Syllabus)
6. Home Economics. (Cape Syllabus)
7. Needlework and Dressmaking. (Cape Syllabus)

To pass the examination a candidate must pass in the official languages and two other subjects. In addition the average percentage of five subjects, including the two official languages, must be 40%. (The best of the other subjects will be considered.)'

Standards Vll - X.

A Course

1. *First official language A. (Cape Syllabus)*
2. *Second official language A or B. (Cape Syllabus)*
3. *Physiology and Hygiene. (In Stds. Vll & Vlll, the existing syllabus; in Stds. lX & X the old Cape syllabus.)*
4. *History. (In Stds. Vll & Vlll - Cape Syllabus)*
5. *Home Economics. (Cape Syllabus)*
6. *Needlework and Dressmaking. (Cape Syllabus)*
7. *Typewriting. (Cape Syllabus)*

B Course

1. *First official language A. (Cape Syllabus)*
2. *Second official language A or B. (Cape Syllabus)*
3. *Physiology and Hygiene. (In Stds. Vll and Vlll - existing syllabus; in Stds. lX & X - old Cape syllabus.)*
4. *History. (In Stds. Vll & Vlll - Cape Syllabus.)*
5. *Needlework and Dressmaking. (Cape Syllabus - adjusted to needs of Housecraft High Schools.)*
6. *Home Economics (Cookery and Nutrition) (Adapted Cape Syllabus)*
7. *Home Economics (Institutional Management) (New Syllabus to be drawn up.)*

OR

Home Economics (Mothercraft and Child Care) (New Syllabus to be drawn up.)

For standard Vll the pass requirements are the same as for standard Vl.

To pass in standard Vlll a candidate must pass in -

(a) an official language A
(b) the other official language A or B
(c) in three other subjects, and obtain 40% of the total marks in six subjects including the two official languages. (The best of the other subjects are considered.)

The pass requirements for standards lX and X are the same as for the ordinary Cape schools. The requirements for a pass in standard lX are the same as those for a pass in the senior certificate examination but pupils who fail to satisfy these requirements may be allowed, with the approval of the Inspector of Schools, to proceed to standard X.

The requirements are:-

1. *First official language A.*
2. *Second official language A or B.*
3. *Physiology and Hygiene.*
4. *Three subjects from : Home Economics, Typewriting, Needlework and Dressmaking, Home Economics (Cookery and Nutrition), Home Economics (Institutional Management),*

Home Economics (Mothercraft and Child Care).

Only six subjects may be taken. 400 marks are allocated to the A language and 300 marks to the B language and 300 marks to all other subjects. A candidate must obtain 40% of the marks allocated the oral examination in the A language or fail the examination in the language. Despite this the marks for oral work are not added to the marks obtained in the written language.

For a pass in any subject the candidate is required to gain at least one-third of the marks allocated to the subject, except in the A language where the pass percentage required is 40%. To pass the examination as a whole the candidate must obtain 760 marks out of the total of 1 900 marks.

A candidate may gain a senior certificate by passing in five subjects (including the two official languages of which one is on the A grade) and obtaining the 760 marks.

The introduction of this examination system has marked another phase in the process of making all the schools in the Province part of an educational unit because not only is there now a single administration for these schools but a tendency towards the use of one examination department. This is, of course, desirable from the point of view of the inspectorate and in the endeavour to secure reasonable uniformity in standards.

3.21. The Steyn Report of the 18th. March, 1968.

The question that arises now is whether or not these three schools are fulfilling as useful a function as possible. In an endeavour to answer this question it is necessary to study the Steyn report "Beroepsgerigte Onderwys van die Meisie tot en met Standard X en/of Matrikulasie in Samehang met die Algemeen Vormende Onderwys". This is a long report; Part 1 comprising 170 pages and Parts 11 and 111 57 and 41 pages respectively. It is an extremely comprehensive and enlightening report and states very clearly the position of womenfolk in relation to the world of industry and commerce and then goes on to discuss the types of education which should be provided for girls so

that the fullest use can be made of their services.

After discussing the phenomenal economic growth of South Africa in recent years and pointing out that not enough use is being made of womanpower compared with other industrial nations, the committee states its opinion that more and new types of schools, re-training institutions and other educational facilities will have to be provided. The emphasis, it says, will have to move further away from the academic school to new types of vocational schools which include in their curricula a strong element of general, formative education. New subjects, syllabuses and curricula will be necessary, new teaching methods, new approaches, techniques and aids will have to be devised, used and continually extended, revised and modernised.[1]

Continuing in this line of thought, which has to do with all secondary education, the committee considered that new types of schools would have to be designed with special provision for all the new educational aids, such as the radio, films, television and language laboratories.[2]

It thought, too, that a much greater variety of subjects and courses would have to be provided for a school population which is growing more heterogeneous.[3]

The report dealt with the proper use of highly-trained staff. Some means would have to be devised whereby the purely administrative work and organisation, the extra-mural activities, the handling of technical aids and the control of the library, would be removed from such staff members so that they would be enabled to use their specialist abilities over longer hours and to the best advantage of the pupils. This might bring with it some measure of differentiation on the staff level.[4]

Pursuing this thought further, the committee thought that the

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1. *Steyn report. Op cit. p.125.*
2. *Ibid. p.126.*
3. *Ibid. p.127.*
4. *Ibid. p.126.*

pupil quota per highly-trained staff member would have to be increased and this would bring with it further alterations to current school design and the necessity for training assistant teachers, technical assistants, laboratory assistants, technicians and school librarians, to name but a few new posts. [1]

To justify the increased expenditure on all educational buildings it was possible that these would have to be used 12 hours per day on every working day of the year. [2]

In order to prevent the development of dead-end courses and water-tight courses there would have to be intelligent co-operation throughout the educational fabric of the nation from the primary to the tertiary level. Bridges would have to be provided between subjects, courses, types of schools, colleges and universities. [3]

The report continues to discuss this general re-planning of education. The reason for this type of discussion and recommendation was that the committee had proved to its own satisfaction that there is no difference in the inherent intellectual powers and abilities of boys and girls and that, therefore, some careful re-thinking of the training of girls for adult life in a much greater variety of occupations was urgently necessary. Girls reach adolescence very nearly two years before boys, maturity two years before men and on the average their life span is five to ten years longer than men's. [4]

In handiness, the ability to distinguish between colours and between high frequency sounds, women are better than men. [5]

In addition women are tending to marry younger so that on the average her last child is at school by the time she is thirty-five years old. This gives a much longer possible working life than hitherto. [6]

The committee found that a higher percentage of women were

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1. *Ibid. p.126.*
2. *Ibid. p.126.*
3. *Ibid. p.127.*
4. *Ibid. p.129.*
5. *Ibid. p.129.*
6. *Ibid. p.130.*

entering the labour market and working for more years than in earlier times, and that furthermore their average standard of education was rising. [1]

There appears also to be some correlation between the educational level of the mother and the size of her family and this in turn indicates that a well-educated women is of greater use to her country than the half-educated one (standard Vlll - X level). There is also a correlation between the educational level reached by the children and that of their parents, particularly, according to some researchers, with that of the mother. [2]

All these findings led the committee to suggest fields in which women could usefully be employed. In this chapter we are concerned with the type of girl who attends a housecraft school and it has already been indicated that many of these are not senior certificate material. In these cases the committee recommended that girls who showed the inclination to do so should be allowed to attend technical high schools with the idea of eventually entering apprenticeship. [3]

There will be some sections of the community very much against this - at least for some years to come - because it is rather against the South African tradition. Leaving this side of the matter, however, it must be recognised that even for the standard Vlll school leavers who wish to enter apprenticeship a certain basic knowledge of mathematics and physical science is necessary. Neither subject is popular amongst the type of girl attending housecraft high schools. In addition the types of work open to girls would have to be of the lighter nature. It has been shown that machine work is usually possible for them (turning and machining) and in fact, in the mass production lines they are rather better than men. There would be some hesitation in apprenticing girls to structural steel work or to most forms of modern building trades. It would be possible to give a long list of trades for which girls would not be suitable and an equally long list of those

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1. *Ibid. p.130.*
2. *Ibid. p.130.*
3. *Ibid. p.135.*

for which they would. There would be little point in this because what is necessary is to establish some fundamental facts. Physically women are usually unable to cope with hard, heavy, physical work. Motor mechanics work, motor body repair work, motor car spray painting, blacksmithing and many forms of welding come readily to mind. The kind of work that they could handle would be found in the various fields of the electronics industry, in certain types of electrical work as, for example, the repair of domestic electrical equipment and office equipment, in the printing industry in many of its trades, in upholstery work and in instrument repair and manufacturing. If the majority of these trades are analysed it will be found that a reasonably high degree of intelligence is required for them. Present indications are that the majority of girls at housecraft high schools have not that degree of intelligence. In addition the technical high schools with which the two housecraft high schools in the Cape Province are linked, do not provide the basic training required for most of these trades. It is therefore to be doubted whether there is a future for this type of girl as an artisan in industry.

There may well be other openings in industry for them. There should be plenty of operators work but, apart from giving some fundamental training in the use of the tools likely to be required in the particular work sought, it is difficult to see what else a technical high school could do. Then, there are the trades for which apprenticeship already exists. Hairdressing is one and window dressing is another. It will be seen, however, that the special secondary schools described in Chapter VI already makes provision for this training.

Another fundamental consideration is that it can reasonably be expected that girls, having served an apprenticeship, will soon marry and be lost to industry, if not permanently, at least for some fifteen to twenty years. At the present rate of change of technical processes, on their return to industry a complete re-training programme would be required. In the case of operators this would not be a serious problem because the training period is short, probably only a matter of

two or three weeks. In the case of skilled trades, the training would virtually be a repetition of the apprenticeship.

The conclusion to be reached appears to be that for girls of average or above average intelligence there are skilled occupations for which they are eminently suitable. For girls of the below average intelligence the number of skilled occupations is decidedly limited and special provision would have to be made for them in a technical high school. Furthermore, the schools at Adelaide and George appear to be too remote from the type of labour market required.

CHAPTER IV

The Commercial High School

4.1. Introduction

The de Villiers Report, in its chapter on Commercial Education, makes the statement, " ..... commercial education has become the most widely needed form of vocational education in this country". [1] This was written in the period 1945-1948 during which the Commission investigated technical and vocational education in South Africa. The statement then seemed to be a sweeping one. In fact it was not. Even then there was a marked economic development in the country particularly in the secondary and tertiary industries, bringing with it a steadily increasing demand for workers in commercial undertakings. The demand still exists and is growing with the economic growth of the nation. According to the Steyn report, in 1960, of every 1 000 women employed, 501.3 were in clerical, bookkeeping, cashier or typist posts. [2] This gives an indication of the demand which exists for properly trained pupils from schools teaching commercial subjects.

There are in the Cape Province twelve institutions which give full-time secondary commercial education. Of these, nine are commercial high schools, one at Upington is at present a division of a combined technical-commercial high school and the other two at Kimberley and East London are still housed in the local technical colleges though functioning as divisions of combined technical-commercial high schools. The present state of enrolments is shown in the table on page 211. In 1969 there were 3 996 pupils in these schools. [3]

Some academic schools take commercial subjects. The conditions laid down will be discussed later but to give some idea as to the number of pupils involved in 1969, in the Junior Certificate examination 4 035 candidates offered typewriting and 9 341 accountancy and commercial arithmetic. For the Senior Certificate examination 2 053 offered typewriting, 3 190 commercial arithmetic, 3 339 accountancy, 571 snelskrif and 422 shorthand. It will be seen later that no accurate

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1. de Villiers Report. Op cit. p.119.
2. Steyn Report. Op cit. Appendices A. Table 46.
3. Figures from Statistics Section, Cape Education Department.

CAPE

PROVINCIAL COMMERCIAL HIGH SCHOOLS

1969

DISTRICT	NAME OF SCHOOL	NO. ON ROLL		NO. OF BOARDERS		NO. OF TEACHERS	
		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
CAPE	GARDENS CAPE TOWN	21	205	–	–	5	8
CRADOCK	MIDLANDS	29	96	4	47	3	4
EAST LONDON	EAST LONDON	122	395	9	82	11	16
GORDONIA	UPINGTON	18	155	4	78	7	6
KIMBERLEY	NORTHERN CAPE	55	337	15	102	16	12
OUDTSHOORN	LANGENHOVEN	122	301	75	196	16	7
PAARL	PAARL	100	366	60	262	12	10
PAROW	TYGERBERG	200	545	–	–	14	19
PORT ELIZABETH	PORT ELIZABETH	16	317	–	–	5	12
STELLENBOSCH	STELLENBOSCH	13	111	–	49	2	6
UITENHAGE	UITENHAGE	3	141	–	–	1	9
WORCESTER	WORCESTER	68	260	26	152	8	8

deductions can be made from these figures as to the total number of candidates who offered the two commercial subjects permitted but it was found that 262 schools offered accountancy and commercial arithmetic and 213 offered typewriting, which were the commonest commercial subjects offered.[1] It is estimated that about 20% of the pupils in standard X at academic schools offer typewriting and this is not enough to supplement the output from the commercial high schools.

This fact is no fault of the Provincial Authorities. The Educational Services Act, No.41, of 1967, which was discussed in Chapter 1, makes it quite clear that no school other than a commercial high school may offer more than two full commercial subjects without special permission being given in each particular case by the Minister. Except in one or two isolated cases such permission has not so far been given. Hence it is that pupils in academic high schools who, for Senior Certificate purposes have to take six subjects of which the two official languages are compulsory, wish to take a commercial course, are compelled to take two subjects unrelated to such a course and are at a serious disadvantage compared with pupils at a commercial high school where four subjects and in some cases five, are commercial subjects. There is an understandable reluctance on the part of these pupils to compromise in this way and it would appear that many pupils are being forced into employment which would not be their first choice.

It is true, of course, that many of these pupils become either part-time or full-time students at technical colleges or private commercial colleges and take the necessary subjects to qualify for the many fields open to them in commerce. This means at least a year's delay before they enter their chosen vocation as fully qualified workers.

This is a question which merits the earnest attention of the Minister and his Department of National Education.[2] It is already

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1. Figures from Examinations Section, Cape Education Department. Total number of high and secondary schools in the Cape Province is 265.
2. The Departments of Higher Education and Cultural Affairs are to re-combine to form the Department of National Education on 1st. November, 1970.

receiving the close attention of the Provincial Directors of Education but they, on their part, will have to provide some guarantee that the commercial education which they are prepared to offer is considerably more vocational than it has been in the past and that the equipment provided be as efficient and the teachers employed be as good as those in the commercial high schools. There are already encouraging signs that this will be done.

4.2. Early Commercial Education

To return to the de Villiers report, the statement is made that "Before the establishment of technical colleges and, more recently of commercial high schools, commercial education was largely in the hands of private commercial schools and business colleges." [1] As far as Cape Town is concerned this is certainly true. In 1892 the Yost School was established at 28, Castle Street and taught typewriting and shorthand. [2] In 1902 a group of business men opened the Civil Service and Commercial College on Church Square. Bookkeeping, typewriting and shorthand were taught. [3]

It was about this time that the Cape Town Chamber of Commerce began to realise the need for some recognised examinations and certificates. In 1904 it appointed a committee of prominent business men from Cape Town, Messrs. J.W. Jagger, H. Beard, W. Duncan Baxter, J.M. Stephen and R. Stuttaford to make arrangements for the holding of examinations based on those of the London Chamber of Commerce. The first examinations were held in bookkeeping, shorthand and typewriting in 1905. [4] These examinations soon attracted comparatively large entries from all over the country (Bloemfontein, Pretoria, Wellington, Worcester, Cradock) [5] and the number of candidates grew from 220 in 1905 to 5 534 by 1913. [6] According to the Cape Argus of 27th October, 1909, the time was past when an untrained person could get a prominent place in the business world. The newspaper went on to say that the Prime

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1. de Villiers Report. Op cit. p.119.
2. Cape Argus. 17th. December, 1897.
3. Educational News, March 1902. p.51.
4. Immelman, R.F.M. "Men of Good Hope" (The Romantic Story of the Cape Town Chamber of Commerce) 1804-1954. Cape Town Chamber of Commerce, Cape Town. 1955. p.276.
5. De Zuid-Afrikaan 1st. July, 1915.
6. Ibid.

Minister and the Superintendent-General of Education thought well of this system of examinations.

Meantime the Cape Education Department, in April 1904, started "Commercial Evening Classes" in Queen Victoria Street with a Cape Town teacher, Mr. R. Black, as principal. Initially there were 30 students who were prepared in a one-year course for the Junior Commercial Certificate of the London Chamber of Commerce. The subjects offered were English, Hollands, arithmetic, bookkeeping, typewriting, shorthand, economic geography, physics and drawing. The Cape Town Chamber of Commerce kept a register of successful candidates and these were given special consideration for appointments. [1] On the 1st. January, 1908, these classes were taken over by the Cape School Board which had attempted to start similar classes at Claremont but could not obtain the necessary minimum enrolment of 25 students. [2]

The Metropolitan Business College, principal Thomas Morris, a Cape Town business man, opened in 1907 and was reputed to be the most up-to-date commercial training institute in the country, obtaining very good successes with its students. The subjects offered included shorthand, snelskrif, typewriting, bookkeeping, office routine, accountancy, commercial correspondence, English, Hollands, French and German. [3]

A famous American school, the Sheldon Schools, opened a branch in Cape Town in 1908 with a Mr. Beardmore from the United States as the first principal. Its purpose was chiefly to give training in salesmanship. By 1914 there were 330 students of this school all over South Africa. [4]

In 1910 the Cape Town Working Youth's Training Institute opened in Macpherson Building, Plein Street, Cape Town. Mr. W.G. Haines was the principal. The subjects taught were bookkeeping, shorthand, snelskrif, typewriting, English and Hollands. [5]

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1. S.G.E's letters. 1/424. Cape Archives.
2. Minutes. Cape School Board, 4th. December, 1907.
3. Cape Church Monthly and Parish Record, October 1909. p.175.
4. S.G.E.'s letters. 1/1255, Cape Archives. Cape Times 16th.July, 1914.
5. Cape Argus 21st. December, 1911. Minutes of Cape School Board 1st. December, 1915. S.G.E.'s letters. 1/877, Cape Times 24th.October,1910.

It was obvious, then, that in this period, the Muir period, much attention was given to commercial training, most of it in private or part-time institutions although it may be deduced from the list of candidates who passed commercial examinations in December 1914, as published in the Cape Argus of the 14th. January, 1915, that several high schools were offering bookkeeping, shorthand and typewriting.

According to Dr. Wulfsohn, bookkeeping was introduced as an optional subject into the then highest standard, standard VI, in 1887, and by 1916 there were in the Cape Province 28 public schools offering bookkeeping, 14 offering shorthand and 7 offering typewriting, the number of pupils involved being 636, 337 and 101 respectively. [1]

4.3. National Advisory Board for Technical Education.

At its third meeting, in Pretoria, on 18th July, 1913, Mr. E.J. Cattell, J.P., one of the members of the board, submitted a memorandum on commercial education. It was noted that the chief agency for the promotion of this type of education was the Associated Chambers of Commerce of South Africa, of which Mr. Cattell was the secretary. He emphasised the fact that until recently no consideration had been given to this branch of educational work in any systematic form by any Government or educational authority.

As previously mentioned, important service was rendered to the country by the Cape Town Chamber of Commerce by the institution in 1905 of competitive examinations held at Cape Town and other places throughout South Africa and as far north as Melsetter. The Johannesburg Chamber of Commerce instituted similar examinations locally in 1909. In 1910 the Association of the Chambers of Commerce of South Africa assumed responsibility for the movement. At this congress a resolution was adopted in favour of the creation of a fund to be raised by voluntary subscriptions from members of Chambers of Commerce affiliated to the Association, the income of which fund should be devoted to scholarships, bursaries and exhibitions. "It is hoped to establish a

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1. " 'n Vergelykende Studie van Beroepsonderwys". Op cit. p.32.

minimum income of £500 per annum, for the benefit of deserving young men and women throughout South Africa." It was proposed to give preference to those who desired to enter technical professions or commercial life, the exhibitions being tenable at suitable schools in South Africa and, in the case of exceptionally deserving young men and women, at approved technological and commercial colleges abroad.

Mr Cattell gave certain examination entries:-

In 1905 there were 220; in 1911 these had grown to 1 007, in 1912 to 1 193 and in 1913 to 2 307. In 1913 the examinations were held in 27 centres and in the following subjects:-

Junior Examination	Senior Examination
Handwriting	English Literature
Arithmetic	Dutch
Commercial Geography	French
Commercial History	German
Commercial Arithmetic	Mathematics
Bookkeeping	Commercial History and Geography
English Shorthand	Political Economy
Dutch Shorthand	Banking and Currency
Typewriting	Commercial and Industrial Law
Elements of Political Economy	Bookkeeping and Accountancy
Business Methods	Commercial Organisation
English Grammar	Fire Insurance
Dutch	Accident Insurance
French	Shorthand
German	Typewriting
Algebra	
Geometry	

He concluded his memorandum by saying that the Association deserved the gratitude of the country for the impetus it had given to commercial education. [1]

4.4. 1913 Annual Report of the Union Education Department.

On page 61 of this report Mr. George Hofmeyr, the Under-Secretary, gives a summary of the position of commercial education in the country.

He records first that some three or four years ago (the actual date was 6th July, 1907 [2]) the Technical Institute in Durban was established and that it included a commercial side preparing day and evening

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1. Report of the Under-Secretary for Education for 1913. (UG 11'14) Op cit. pp. 35 and 36.
2. "Natal Technical College 1907-1957" Op cit. p.24.

students for commercial examinations (British examinations and those of the Association of Chambers of Commerce of South Africa). Mr. Hofmeyr may have been alluding to January 1909 when Benjamin Mason Narbeth became the first full-time principal of this institute. In any event he went on to write "The Durban School might well be taken as a basis upon which to extend commercial education throughout the Union. Something similar was in existence in Pietermaritzburg." (A technical institute had grown out of a Business College and appointed its first principal on 22nd. March, 1910. [1]) "In Pretoria, Johannesburg, Grahamstown and Cape Town a little has been done in this direction. In other large centres, Kimberley, Port Elizabeth, East London, Kroonstad and King Williams Town, for example, nothing whatever has been done officially." [2]

The Under-Secretary then went on to disclose that the evening classes established seven or eight years previously by the Education Department of the Cape Colony and subsequently taken over by the School Board for the Cape Division had, for a number of reasons, not been a success either educationally or financially and that he believed that they had been discontinued. The majority of the students in the Cape Province were being trained at private business schools.

After a year or two it had been discovered that almost all the candidates for the commercial examinations had made typewriting and shorthand their principal or only subjects. For this reason, and in order to encourage the study of more general subjects of a commercial character, a rule was made by the Chamber of Commerce that no certificate would be awarded for typewriting or shorthand until a candidate had obtained a pass in another subject such as English, Dutch, commercial history, political economy or commercial arithmetic. This diminished the number of candidates but made for greater efficiency and some of the private institutions accommodated themselves to the new provision.

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1. "The Pietermaritzburg Technical College 1910-1960". Op cit. p.16.
2. Annual Report of Union Education Department for 1913. p.61.

The Under-Secretary also noted that the Railway Institute at Salt River included a few commercial subjects in its curriculum. (This later became the technical college and will be referred to again - author). He also elucidated the position in regard to the early examinations. It appears that the Cape Town Chamber of Commerce acted at first as a local centre for the London Chamber. Johannesburg became another local centre two years afterwards (1907). In 1910 the Association of Chambers of Commerce of South Africa decided to become an examining body in its own right but it adopted in the main the London Chamber's scheme and syllabuses. The first examinations were held towards the end of 1911, the second in October-November, 1912 and the third in October-November, 1913.

The Junior examination consisted of "obligatory" and "optional" subjects. Candidates were permitted to enter for individual subjects but to obtain the Junior Commercial Examination Certificate they were required to pass in all the "obligatory" subjects and at least two "optional" subjects selected from groups A,B or C, not necessarily in one year.

The obligatory subjects were: English, handwriting, arithmetic, a modern language and commercial geography.

The optional subjects were:

Group A. Commercial arithmetic, bookkeeping, shorthand, typewriting, elements of political economy, business methods.

Group B. Dutch, French, German, Portuguese, Esperanto.

Group C. Algebra, Euclid or geometry, trigonometry.

The Senior Examination also consisted of "obligatory" and "optional" subjects. Candidates were awarded separate certificates for proficiency in one or more subjects but to obtain a "Higher Commercial Education Certificate" candidates were required to pass in all the "obligatory" subjects and in at least two of the "optional" subjects - again not necessarily all in one year.

The obligatory subjects were: English literature; two of the following languages (preferably including Dutch), Dutch, German, French,

Portuguese, Esperanto, mathematics, commercial history and geography, elements of political economy.

The optional subjects were: Fire insurance, accident insurance, marine insurance, life assurance, the Stock Exchange, foreign exchange, banking and currency, commercial and industrial law, commercial organisation, bookkeeping and accountancy, shorthand, typewriting.

The pass mark was 50%, for a pass with distinction 65% and for a pass with honours 75%.

The report went on to say that merchants in Johannesburg, Durban and Cape Town recognised and appreciated the value of the training offered in the commercial classes and were offering exhibitions and studentships, giving more rapid promotion and placing monetary value on the certificates. The Chambers of Commerce in these cities, with the addition of Bloemfontein, Pretoria, Pietermaritzburg and East London were taking more interest in the examinations and inducing members and employees to recognise their value.

The Under-Secretary added a plea from Mr. E.J. Cattell that the National Advisory Board for Technical Education take practical steps to give early effect to the resolution adopted at the Conference on Technical Education, November 1911, to the effect that "the Government should establish schools or classes for commercial education throughout the Union wherever possible". [1]

However, apart from the work carried out by the technical colleges (it is known that Durban and Pietermaritzburg had day schools of commerce in the period 1910-1919) and the establishment of a commercial day school as a department of a Government school at Troyeville in Johannesburg in 1917, nothing seems to have been done towards establishing commercial high schools in the Cape Province until 1924. Before this is discussed, however, there is one more point of importance to note.

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1. Report of the Under-Secretary for Education, 1913. Op cit. p.61.

4.5. The Second National Advisory Board for Technical Education.

It will be remembered that this second board was appointed in November 1915 for a period not exceeding three years and that most of its work was conducted through two examination committees. The committee for commercial examinations comprised the Under-Secretary for Education as chairman, with Professor Bohle, Messrs. Cattell, J.A. Foote, H. Gibson, Principal Hemer (Cape Town), Principal Seymour Hosley (Pietermaritzburg), Principal Narbeth (Durban) and Messrs. Howard Pim and H.G. Parkiss.

Early in 1917 the Board considered a request from the Associated Chambers of Commerce that it take over the commercial examinations. It agreed to this because it meant then that all vocational examinations would be under one control. A Preliminary Commercial Certificate course was instituted at short notice in 1917. The course comprised: A language, civics, mathematics or arithmetic, business methods, commercial history and geography. A scheme was also drawn up for a National Commercial Certificate which would take two years part-time after the Preliminary Certificate course and an Advanced Commercial Certificate. Since these were all part-time courses at this stage, the details will not be given. The point at issue was the fact of the transfer of control of the commercial examinations. [1]

4.6. The Establishment of the Commercial High Schools in the Cape Province.

Except for the establishment of a commercial section in conjunction with the Oudtshoorn Industrial School to which further reference will be made, the origin of these commercial schools in no way resembles that of the two types of vocational school already discussed.

4.6.1. Gardens Commercial High School

The first full-time commercial high school to develop in the Cape Province was started in 1924 at the Cape Technical College. (This

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1. Report of the Under-Secretary for Education, 1917. Op cit. pp. 57 and 59.

college had been started by the Province from the original railway classes at Salt River, which had been placed under the control of a full-time principal in 1914,[1] appointed by the School Board which was responsible for the classes until 1917. In this year a special Board was created to control the new technical college. Despite the fact that the Municipality of Cape Town donated a valuable site in Longmarket Street for this college and made a grant of £1 000 per annum, the Provincial Administration was unable to carry the financial burden of completing and equipping the building and the Union Government assumed control and took the responsibility under the Financial Relations Act of 1922 and defined the position more clearly in the Higher Education Act of 1923. [2]) This school formed part of the Department of Commerce. Statistical returns for the years 1924-1966 do not differentiate between pupils in the Commercial High School, full-time students in the Secretarial School and full-time students in the Teacher Training Department. The courses offered were the Junior and Senior Certificate courses and the Intermediate Course when this was introduced. These courses will be described generally in a later paragraph.

In 1955 by the provisions of the Vocational Education Act, the Department of Education, Arts and Science assumed control of the technical colleges and made education at commercial high schools free. It was also planned to remove the school from the College building in Longmarket Street, which was hopelessly overcrowded. A site was found near Government Avenue in the Gardens and the school was moved into temporary accommodation there in 1967. A new school is planned for this site, to accommodate 600 pupils but this has not yet been started because of a delay in transferring the ground to the Educational Trustees of the Province (the Provincial Secretary and the Director of Education). The result of this delay is that the school is limited to an enrolment of about 230 pupils and the demand for places far exceeds this number. The school is now known as the Gardens Commercial High

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1. " 'n Vergelykende Studie van Beroepsonderwys" Op cit. p.33.
2. Second Report of the Education Administration Commission. (UG 19'24) Op cit. p.29.

School and is quite independent of the Technical College, having been transferred from State control to Provincial control on 1st. April, 1968. [1]

4.6.2. Port Elizabeth Commercial High School

The story of the second commercial high school in the Cape Province bears a strange resemblance to that of the Gardens Commercial High School. The school was started as a section of the Department of Commerce at the Port Elizabeth Technical College (now the Port Elizabeth College for Advanced Technical Education) in 1929 with an initial enrolment of 60 pupils. The table of enrolments for Commercial High Schools on page 223 shows some teething troubles in the very early years but the present situation is that the school cannot expand beyond its present enrolment until the new school is built, initially for 450 pupils, eventually for 750, at Linkside. The architects and quantity surveyors are busy with the plans. At present the school is occupying some of the Gardham Block, part of the College accommodation, and all accommodation there is at a premium because of the demand for all forms of part-time vocational education. This school, in common with all commercial high schools, takes pupils who have passed standard VII and offers a three-year course leading to the Junior, Intermediate and Senior Commercial Certificates.

4.6.3. East London Commercial High School

This school, too, started as a section of the Commerce Department of the East London Technical College in 1932. With its large hinterland, places in the school have always been in demand. The problem again is one of accommodation. Since 1st. April, 1968 when the school was transferred to the Province it has been integrated for administrative purposes with the technical high school. A new commercial high school is being built on the old racecourse to accommodate 750 pupils of whom 180 girls and 60 boys will be in hostels. (A new technical high school for 750 pupils, 240 in hostels, is being built on an entirely different site just beyond the hospital.) The schools will then function as

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1. Relevant details supplied by the Registrar of the Cape Technical College.

COMMERCIAL HIGH SCHOOLS

CAPE

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separate entities again. At the present time enrolments have to be severely restricted because, occupying a part of the technical college, the number of classrooms that can be allocated to the school is determined by the ever-increasing demand for other forms of vocational education.

4.6.4. Midlands Commercial High School, Cradock.

This school started as a section of a continuation class institution. Possibly it will be as well to define this term because it will be used again. A continuation class may be started, subject to the consent of the Department of National Education, provided there is an enrolment of not less than 15 pupils and an enrolment of not less than 8 pupils per subject (other than advanced technical subjects). The classes may not be conducted for private gain and must be under the control of a local committee with corporate status whose constitution has been approved by the Minister. The staff have to be remunerated as determined by the Minister who also, in consultation with the Minister of Finance, determines the tuition fees to be paid. Grants-in-aid are paid by the Department which ensures that there is no financial loss in any year. Profits are deducted from the grant for the following year. This is the present system and its virtue is that it virtually guarantees that, provided the committee keeps proper financial accounts, it cannot find itself in financial difficulties. The system was not always as generous and at the time when the Cradock school started the Government made a small contribution to the running of these classes. Hence there had to be some financial backing, usually from some charitable organisation or the institution had virtually to run on the fees collected.

In the 1929 annual report of the Union Education Department under the section dealing with part-time and continuation classes, it is to be noted that approved courses of instruction formulated by supervisory committees were approved for a number of centres throughout the Union, amongst them Cradock.

These classes were started by the local branch of the Afrikaanse Christelike Vrouevereeniging with the approval of Dr. Gie, Secretary of the Union Education Department. The grant for that year, 1929, was £130. The purpose of the classes was to encourage school leavers with only a standard VI qualification, to continue their studies and prepare themselves for a career in the business world. The first classes were evening classes starting at 8 p.m. and were offered in only a few elementary business subjects. They were held in the café portion of the ground floor of the Church hall. The rent was £3 per month and the committee considered this too high and therefore made efforts to find other accommodation.

The grant from the Union Education Department for 1930 was £250. The collection of class fees was giving so much trouble that it was necessary to engage a solicitor to collect arrears.

In 1933 the classes were transferred to rooms in the old Boys' School hostel known as "Toekoms" (the Altior Preparatory School stands on this site now).

From 1935 provision was made for instruction in shorthand, typewriting and bookkeeping in day classes. The evening classes still continued to function and taught these subjects and for a few special pupils also Afrikaans, English, geography and civics.

In 1941 the classes were transferred to a part of the old Wilson School building.

By 1943 it seemed necessary to appoint a more representative body to control the school and on the 19th. March, 1943, the Mayor, Mr. A. Cull, at a meeting called for the purpose, thanked the Afrikaanse Christelike Vrouevereeniging for the outstanding work that they had done in founding the Midlands Commercial High School. A committee was appointed comprising representatives from the Helpmekaar, the Town Council, the Divisional Council, the Afrikaanse Christelike Vrouevereeniging, the Chamber of Commerce, the School Board and the parents.

In April of the same year a request to purchase the Wilson School from the Municipality was refused.

In 1946 a request was made to the Municipality for a grant of 10 morgen of ground for a new school. A deputation met the Secretary for Education in November to ask for Departmental help in building the school. The first answer was that either the School Committee or the Municipality should build the school and thereafter the Department would take it over as a State school. In 1947, the Secretary for Education, Advocate A.A. Roberts, advised the School Committee to raise a loan from a bank with the guarantee that the Department would take over the building when complete. The attempt to raise a loan was unsuccessful.

In 1949 Birbury House, next to the school, was rented and used as a girls' hostel.

In 1951 the School Committee was advised to request the Department to declare the school a State-subsidised school in terms of Act No. 29 of 1929. For this purpose a deputation waited on the Department in May 1952. (The advantages of this arrangement are the granting of pension rights to staff and bursaries to pupils.) In 1952 the school was, in fact, recognised as a State-subsidised commercial high school. The Department then paid the salaries of teachers of full-time pupils and 50% of all other approved expenditure. At this time the income of the school, apart from school fees, was an annual donation of R100 from the Municipality and R40 from the Divisional Council.

In December 1952, Treasury was approached for permission to purchase for £4 500 the two buildings adjacent to the school for use as hostels. This was approved and the Department paid 50% of the interest and redemption costs.

In 1962 the Municipality was again approached for a grant of 10 morgen of ground and on this occasion the grant was made. After several approaches to the Department in July 1964, the Minister approved the building of a new school for 300 pupils, with planned extensions to

accommodate 450 when necessary, a hostel for 120 girls and another for 60 boys. The cost was estimated at R680 000. However, the quantity surveyors estimate was R800 000 and so the hostel for boys was temporarily abandoned.

The inflation scare at the end of 1965 caused some re-planning to be done and in the end the new school was built to house 450 pupils, 120 girls in hostel and the boys remained in the old hostel some two miles from the new school. The intention was to build a hostel for 30 boys and eventually to extend it to accommodate 60. However, the school is not filling as quickly as was anticipated and so a portion of the girls' hostel is to be used as a hostel for the boys.

The new school was completed in October 1968, taken over immediately as a State school, so that the loan could be liquidated, and then in January 1969 it was transferred to the Cape Education Department. [1]

4.6.5. Paarl Commercial High School

On the occasion of the 21st. anniversary of the founding of this school in 1950, Dr. D.F. Malan, the Prime Minister, wrote "The Paarl Commercial School is a child of the self-sacrificing interest and foresight which was characteristic of the late Mr. Jacob Dreyer and the Helpmekaar Association of Paarl.

How well I still remember the fervour with which the former pleaded the cause of the young people and their need of commercial and technical education to me as the responsible minister and how the Helpmekaar was only too willing to give practical assistance as a guarantee. Prophetically both had seen that the Paarl would become the important industrial centre that it is today ..... ." [2]

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1. All details provided in a letter from the Principal dated 9th.October, 1970 and in the annual report of the school for 1969.
2. The actual message as printed in the Commemoration Magazine, 1929-1950 was „ Die Paarlse Handelskool is 'n kind van self-opofferende belangstelling en die vèrsiende blik wat 'n uitstaande kenmerk was van wyle Mnr. Jacob Dreyer en van die Helpmekaarvereniging van die Paarl.

   Hoe goed kan ek my nie nog herinner die gloed waarmee eersgenoemde die belang van 'n groot deel van die opgroeiende jeug en hul behoefte aan handels-en tegniese onderwys by my as verantwoordelike minister bepleit het, en hoe die Helpmekaar te gewillig was om hulle kragtige hulp as 'n waarborg toe te sê. Profeties het albei gesien dat die Paarl nog sal word die belangrike industriële middepunt wat die reeds vandag is ..... ."

This message immediately gives us several important historical facts. The Paarl Commercial High School started in 1929 (with a part-time and full- time enrolment of 192 [1]) and the necessary guarantees and much financial help were provided by the Helpmekaar Association.

This Association was a nation-wide one but was started in Paarl by Mr. J.E. de Villiers and people associated with him who collected money to pay off the rebellion debt and with the money left over to give assistance (mainly educational) to the many poor people in the depression years following the 1914-1918 war. (The so-called rebellion debt was that incurred by the fines and legal expenses of those followers of General de Wet who opposed participation in the 1914-1918 war on the side of the British and their Allies. Mr. J.E. de Villiers sent a letter to Die Burger appealing for funds to help pay off this debt and the amount required was over-subscribed thus enabling an educational trust to be established which is still in existence.)

It is not to be supposed that the early years of this institution were financially easy ones. For a time evening classes were held in the Paarl Training College and later in the lower storey of an old hostel belonging to the Paarl Gymnasium. But it was evident that a building had to be purchased. A large, centrally-situated property belonging to a Mr. J.H. Neethling was found, the purchase price being £2 400 - a very large sum in those days - and the half-yearly payments on the mortgage bond amounted to £159 for a period of 10 years. The Paarl branch of the Helpmekaarvereeniging did not have enough money but the Cape Central Management paid £100 yearly until the school was well-established, when the amount was somewhat reduced. In 1950 the amount received was £20. Other local organisations helped - the Town Council, the Afrikaanse Christelike Vrouevereeniging and the Divisional Council and all of the contributions together enabled the school to obtain Government help on the £ for £ basis. The early days were certainly difficult but with the enthusiastic help of the management committee the obstacles were overcome and the school grew so steadily

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1. Commemoration Magazine. p.99.

that in 1936 the Union Education Department was prepared to take over the day school as a State school. The property was purchased by the Government from the Helpmekaar Association which was able to pay off the balance of its bond and retain a nest egg of £1 200. This amount was at first invested and the interest used to assist needy pupils of the commercial school but it soon became evident that the State took very good care of its own pupils and so the interest was used to help poor pupils from other local schools. [1]

(The evening classes in Paarl - from which the need for a day school became apparent - were started in 1927 and two members of the Paarl Teachers Association, Mr. D.J. Kritzinger and Mr. S.J. Malherbe, gave their services in order to see that the youth of Paarl were obtaining further education after leaving school. The Helpmekaar Association voted £50 yearly for the evening classes for these two years.) [2]

4.6.6. Langenhoven Commercial High School, Oudtshoorn.

In Chapter 11, paragraph 2.7., when giving some details about the Oudtshoorn Industrial School, it was mentioned that in 1927, two years after the transfer of the trade and industrial schools to the Union Education Department, some girls were admitted to the school (and presumably some boys) to receive commercial training. As a result the numbers increased to 62 and continued to increase until in 1935 they reached 125. In 1936 the commercial pupils moved to another site and building (one of the "ostrich" houses which still serves as a hostel) and the Langenhoven Commercial School came into being. The fact that there was a very real need for a commercial school in this area is obvious from the steady increase in pupil numbers, halted in recent years by a lack of hostel and classroom accommodation.

When the commercial pupils first transferred, the commercial boys had to retain their hostel accommodation in the George Road hostel of the trade school until a hostel was built for them. It is of interest

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1. Commemoration Magazine. Op cit. p.8.
2. Ibid. pp. 13 and 19.

to note that the first buildings erected for the commercial school were built by the boys from the Kingwilliamstown School of Industries (a Children's Act School) who started the work in 1934. There have been additions to the accommodation since then, of course, but the present position is that an entirely new school block and hall to accommodate 600 pupils is being built on a site on the opposite side of the road from the present building complex. The present permanent buildings comprising the school block will be converted as far as possible into additional hostel accommodation for girls. Some of it has to be demolished because of a main road widening scheme and the prefabricated classrooms will be removed to give more recreation space.

4.6.7. The Northern Cape Commercial High School, Kimberley.

There are several references in Chapter 11 to the development of a technical college in Kimberley. The tradition of providing vocational training in Kimberley started as far back as 1895 when some of the work of the School of Mines was undertaken there. Professor J.G. Lawn's name is associated with some of the early work and a little later in 1898 Professor John Orr's name. The Anglo-Boer War caused a temporary disruption of activities but the work with full-time students commenced again in late July 1900 and in March 1901 for evening students. In 1903 the School of Mines transferred to Johannesburg but it was decided to carry on with part-time classes, mostly for de Beer's apprentices, and by 1919 there were some 200 part-time students and 6 part-time teachers. The 1923 Higher Education Act, No. 30, which brought technical and vocational education of this type under the control of the Union Department of Education gave a tremendous boost to technical education. A new governing committee of six members together with the principal was formed and seemed to have given new stimulus to the work because by 1925 it was necessary to take over a hostel as classrooms to accomodate the increasing number of students. Part-time classes in commercial subjects were introduced and in 1930 the classes became known as the Griqualand West Technical Institute. It remained very much alive despite those lean years 1932-1936 when the diamond

mines were closed and Kimberley became a ghost town. Commercial education, particularly, prospered and in 1941 a private commercial school, the Rhodes Commercial College, was absorbed by the technical institute. This meant, in practice, that a small, full-time commercial school started in the technical institute in 1942. In 1943 the Minister for Education, Mr. J.H. Hofmeyr, sanctioned the use of the new name Northern Cape Technical College and this again seemed to give a new impetus to the work being done on behalf of the institution. The first phase was the purchase of the Convent Buildings in Du Toitspan Road for the full-time and part-time commercial classes. Then it was decided to build a new college building altogether and the City Council gave a site in what is now the new civic centre. The public of Kimberley subscribed R30 000, de Beers gave R30 000, the City Council gave R30 000, the Government gave R90 000 and made a 40 year loan of R200 000. The first sod was turned on 9th November, 1949 and the new building was opened on 8th April, 1952 by the Honourable the Minister of Education, Mr. J. Viljoen. In this building the full-time technical and commercial high schools gradually grew into large bodies.[1] At the time of re-transfer to the Cape Province the schools were temporarily combined under the principal of the College, Mr. J.D. Beyers, and will continue to function as a combined school until the two new schools are built, each for 750 pupils. The plans are being completed. The commercial school will have hostel accommodation for 120 girls and 60 boys and the technical high school hostel accommodation for 360 boys. The numbers in each of the schools are at present restricted because of lack of classroom and hostel accommodation.

4.6.8. Worcester Commercial High School

It was in 1913 that Mr. J.A. van Rooyen was appointed as commercial subjects teacher at the Boys' High School, Worcester. Shortly after his appointment part-time commercial classes were started. In 1915 the late Mr. B.P. Eybers was appointed as principal of the school and

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1. Jubilee Edition 1943-1964 Northern Cape Technical College Magazine. pp. 8 - 15.

it was soon after this that girls were allowed to take full-time commercial subjects at the boys' school.

Mr. C. van Niekerk followed Mr. van Rooyen as commercial subjects teacher at the school in 1939. He began immediately to exert himself to establish a technical college in Worcester. His ambition was realised when he was appointed responsible lecturer at the Worcester branch of the Cape Technical College on 21st. January, 1941. Three lady assistants were appointed at the same time and the college began functioning with 39 full-time commercial students. The two corner stones of the new building for the College were laid on 26th. November, 1941 and the building was opened on 7th August, 1942. In addition to full-time and part-time commercial classes, there were apprentice classes and the only full-time health inspectors' course offered in the country.

Following the passing of the 1955 Vocational Education Act, Worcester became an independent technical college. At the beginning of 1963 the health inspectors' course was transferred to the Cape Technical College and in 1965 the apprentice classes were transferred to the Drostdy Technical High School. Thus from the 1st. February, 1965, the institution changed its status from that of a technical college to that of a commercial high school. This move was warranted in order to secure more room to expand the full-time commercial activities.[1] Present planning is to build two extra classrooms, a praktikum room, and to extend two of the hostels but because of the demand for places in the school, another investigation is shortly to be made to determine if this extra accommodation is sufficient.

4.6.9. Stellenbosch Commercial High School

This school, too, started as a branch college of the Cape Technical College and after the 1955 Vocational Education Act became an independent college called the Stellenbosch College for Home Economics, Commerce and Art in 1959. One of its divisions was a full-time commercial high

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1. School Magazines, Worcester Technical College, 1941-1957, and Worcester Commercial High School, 1966.

school. It is only possible to give its enrolment figures from the time that the college became independent because before that time the enrolment was combined with the Cape Technical College statistics. It can be seen from the table on page 223 that the full-time commercial school was never very large, partly due to limited hostel accommodation, partly because of the proximity of the older established school at Paarl and also doubtless due to the existence of some very well-known schools in this university town.

On April 1st. 1968 the college was divided into two parts the one, now called Stellenbosch Technical College, remaining under the control of the Department of National Education and the Stellenbosch Commercial High School being transferred to the control of the Cape Provincial Administration.

The problem here, as it is in East London, Port Elizabeth and Kimberley, is the sharing of accommodation with a technical college and having two principals under one roof. In the former cases the problem is being solved by the erection of new school buildings. The problem in Stellenbosch is not so straightforward because the school is small and in the case of the boarding pupils, it would be possible and certainly more of an economic proposition to transfer these pupils to Paarl or Worcester. The problem which remains is what to do with the day pupils? If the Minister gives permission for a limited number of academic schools to take more than the presently prescribed two commercial subjects, then the solution would be to send these pupils to one or other of the larger schools in the area. This problem is likely to be solved in the very near future.

4.6.10. *Tygerberg Commercial High School, Parow.*

It was in September, 1953 that it became obvious that there was a need to provide facilities for commercial education, full-time and part-time, in the fast growing area known as the Tygerberg, to serve growing towns like Bellville and Parow. The solution did not appear to be the establishment of yet another branch of the Cape Technical College, which already had its administrative capacity overtaxed.

Mr. M.L. Visagie, now an education planner with the Department of National Education in its Education Bureau, and who later became the first principal of the institution, interviewed officials of the Department of Education, Arts and Science to endeavour to gain support for the establishment of continuation classes. They were sympathetic and so a committee was formed. A constitution for the classes was drawn up and submitted to the Department. Even before the necessary permission was obtained, courses were advertised in snelskrif, shorthand, typewriting, bookkeeping and home industries. The response exceeded all expectations and instead of the expected seven part-time teachers, fourteen were required when work started at the beginning of the third quarter, 1954. Permission to start continuation classes was obtained and an amount of £640 made available for the balance of the financial year ending 31st. March, 1955. The classes were called the Tygerberg Continuation Classes to indicate that not only Bellville was being served but also Parow and district. In the first six months 252 students attended classes the range of which had been extended to include English and Afrikaans for the Junior and Senior Certificate courses.

A committee comprising Messrs. Jan Haak, S.F. Kotze, R. Coetzee and M.L. Visagie was formed to attempt to find suitable premises and to investigate the possibility of founding either a full-time commercial school or a technical college. A deputation waited on the Secretary for Education, Arts and Science, Mr. H.S. van der Walt, to present the case and he suggested that they raise a loan to cover the cost of erecting permanent buildings and promised that the Department would subsidise the interest and pay off the loan when eventually the school was taken over by the Department. A site was obtained for £27 500 and the second storey of the Inland Revenue building in Bellville taken over so that a full-time school could be started at the beginning of 1956. Architects were appointed to plan the permanent buildings, estimated to cost £110 000. This was eventually raised to £125 000 with the permission of the Department.

The full-time school opened on the 23rd. January, 1956, with an enrolment of 120. The phenomenal growth of the school is clearly shown in the enrolment figures given in the table on page 223. In the years 1958 and 1959 many applicants for places had to be refused because of lack of accommodation. The school was enlarged several times in the next two years and was eventually taken over as a State school on 1st. January, 1961. It has been enlarged again since that date and present planning is to allow further extensions to accommodate 800 pupils. That number will easily be obtained and it appears that a new commercial high school will have to be built quite soon. [1]

4.6.11. Uitenhage Commercial High School.

The Port Elizabeth Technical College started a branch college at Uitenhage many years ago chiefly to provide the part-time education that had to be given to apprentices. At that time these apprentices came mainly from the workshops of the South African Railways. As was mentioned in Chapter 11, Uitenhage is today a fairly large industrial centre with a number of secondary and tertiary industries. After the 1955 Vocational Education Act, the branch college at Uitenhage became a technical institute (today it is called the Uitenhage Technical College). With growing industry comes a demand for commercially trained staff and so it was that in 1960 it was decided to start a full-time commercial high school as a part of the technical institute. The first enrolment was 35 pupils. This grew steadily until it reached about 100 when, as is usual with these schools, lack of accommodation prevented further growth.

At the time of the transfer of vocational schools to the Provinces in April 1968, the Cape Education Department redecorated the abandoned Innes School to serve as temporary quarters for the commercial high school but the accommodation is still completely inadequate. However, a site is available alongside that of the new technical high school and a school for 450 pupils is planned for this site with hostel

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1. Tygerberg Commercial High School. Commemoration Magazine, 1960.

accommodation for 120 girls and 60 boys. Building is likely to start in 1971.

4.6.12. Upington Commercial High School.

To some extent the history of this school has been covered in Chapter 11 when the Upington Technical High School was dealt with. It will be remembered that at present the two schools are combined and share accommodation but the rapid growth of the area demands that more generous facilities for vocational education be made. A new commercial high school to accommodate 450 pupils and with hostel accommodation for 240 girls is being planned on a site adjoining the present site. The exisiting buildings and hostels will then be converted into a separate technical high school.

4.7. Curricula and Examinations

4.7.1. Introduction

In sections 4.3., 4.4. and 4.5. of this chapter, the very early examinations in commercial subjects were dealt with. Since 1927, so far as can be ascertained, there have been fifteen handbooks issued dealing with commercial examinations. It would appear unnecessary to deal with each of these but only to point out any major changes which have been introduced, and these only when they affect the commercial high schools.

4.7.2. Examinations 1927-1932

In the early years, 1927-1932, examinations were set for a Preliminary Certificate in Commerce. It was set for pupils who had completed the primary school course and proposed to proceed to a specialised course in commercial subjects. It was intended to outline a one-year full-time course but candidates were allowed to accumulate subject successes until the conditions for the certificates were satisfied. This obviously was intended to help part-time candidate who could not be expected to complete the course in one-year. The certificate was

standard V11 level and pupils had to choose from one of two groups:-

(a) Public Service Group

(i) Official Language
(ii) Arithmetic
(iii) Second Official Language
(iv) & (v) Two from:
Bookkeeping
Business Methods
Civics
Geography
History

(b) General Group

(i) Official Language
(ii) Arithmetic
(iii)(iv) & (v) Three from:
Bookkeeping
Business Methods
Civics
Geography
History
Second Official Language

A pass in this course was the entrance qualification to the National Junior Certificate in Commerce which was at standard V111 level. The course for this certificate was of one year's full-time or two years' part-time duration. There were four subject groupings:-

(a) Public Service Group

1. Language A
2. Second Language A or B
3,4,5 & 6. Four from:
Mathematics (Commercial)
Bookkeeping
History
Geography
Science
German
French

Candidates had to pass in at least two subjects at one examination.

(b) Bookkeeping Group

1. Language A
2. Mathematics (Commercial)
3. Bookkeeping
4. Commerce
5 & 6. Two from:
Second Language A or B
History
Geography
Shorthand 60 words per minute.
Typewriting

(c) Clerical Group

1. Language A
2. Commerce
3. Shorthand 60 words per minute
4. Typewriting
5 & 6. Two from:
Second Language A or B
Mathematics (Commercial)
Bookkeeping
History
Geography
Shorthand (Second Language 60 words per minute)

(d) Commerce Group

1. Language A
2. Mathematics (Commercial)
3. Bookkeeping
4. Commerce
5 & 6. Two from:
Second Language A
History
German
French
Typewriting

The National Junior Certificate in Commerce was the entrance qualification to the National Intermediate Certificate Commercial Course which was of standard 1X level and required one year's full-time or two years' part-time study. There were again four groups. The Public Service Group contained the same subjects as for the Junior Certificate

but economics was added to be taken as subject 3,4,5 or 6. In the Bookkeeping Group this also applied and the shorthand speed was increased to 80 words per minute. In the Clerical Group shorthand at 80 words per minute was compulsory and economics was added as an optional subject. In the Commerce Group for some inexplicable reason geography became a compulsory subject and bookkeeping and economics became optional subjects. Except in shorthand, all papers were of three hours duration.

The National Senior Certificate Commercial Course was a one year's full-time or two years' part-time course following the passing of the Intermediate Certificate. The groupings remained the same except that law was added to the Public Service options but the shorthand speed became 100 words per minute. In addition a General Group was added consisting of-1. Language A

2. One from: Second Language A or B, French, German.
3 & 4. Two from: Commercial Mathematics, Economics, Law, Science, Bookkeeping.
5 & 6. At least two not taken under 2 and 3.

4.7.3. <u>The 1939 Handbook of National Commercial Examinations.</u>

Although there was a handbook issued in 1938 and there were significant changes from the previous courses, the 1939 handbook covered these and introduced more. Hence the 1938 handbook will not be discussed.

There were no significant changes in the Preliminary Commercial Certificate Course. Only one official language on the A grade was required together with four other subjects and the examination papers were still of two hours duration.

The National Junior Certificate, as it was now called, became a course which was, or could be, much more general than commercial if required. Candidates were still required to pass in six subjects, and the course still required one year's full-time or two years' part-time study after a standard VII pass which was no longer limited to the Preliminary Commercial Certificate. The subjects were:-

Group 1. One Official Language A. (English or Afrikaans)

Group 11. Any five subjects from:-
(a) Second Official Language A or B. (English or Afrikaans)
(b) French or German or Zulu or Xosa or Sotho or Tswana.

(c) Geography
(d) History
(e) Mathematics or Commercial Arithmetic
(f) Physical Science (not to be taken with Physics or Chemistry)
(g) Chemistry (not to be taken with Physical Science)
(h) Physics (not to be taken with Physical Science)
(i) Geology
(j) Biology
(k) Agricultural Science
(l) Bookkeeping
(m) Commerce
(n) Shorthand 60 words per minute (English or Afrikaans)
(o) Typewriting

Candidates were not allowed to select more than two science subjects.

A hint of things to come was given in two notes added to the curriculum, to the effect that the Public Service Commission and the Railways Administration would recognise the certificate only if both official languages were endorsed on the certificate.

No mention was made in this handbook of the Intermediate Certificate Course. Instead there were two Senior Certificate Courses, A for the National Senior Certificate and B for the National Senior Certificate (Matriculation Exemption). The courses were designed to take two years full-time or four years part-time from the Junior Certificate level.

For the National Senior Certificate the subjects and grouping were as for the Junior Certificate Course given above. Shorthand speed was 100 words per minute. Some subjects were added to the elective subjects:- bookkeeping and commercial arithmetic (not to be taken with commercial arithmetic), economics, mercantile law.

For the Matriculation Exemption Certificate the arrangement of subjects was quite different.

Group I. One Official Language A (English or Afrikaans)

Group II. One from:-
Second Official Language A or B (English or Afrikaans), French, German, Xosa, Zulu, Sotho, Tswana.

Group III. One from:-
Biology, Botany, Chemistry, Geology, Mathematics, Mechanics, Physical Science (not to be taken with Chemistry or Physics), Physics, Agricultural Science.

Group IV. One from:-
(a) A subject under Group II not already taken.
(b) Mathematics, if not taken under Group III.
(c) History or Geography.

Group V. *Any two subjects (not already taken) selected from the following list:-*

1. *Bookkeeping (not to be taken with 2.)*
2. *Bookkeeping and Commercial Arithmetic*
3. *Building Construction and Drawing*
4. *Chemistry*
5. *Commerce*
6. *Economics*
7. *Electrotechnics*
8. *Geography (if not taken under Group IV)*
9. *Geology*
10. *Heat Engines*
11. *History (if not taken under Group IV)*
12. *Machine Construction and Drawing*
13. *Mathematics (if not taken under Group IV)*
14. *Mechanics*
15. *Mercantile Law*
16. *Physical Science (if not taken with 4 or 17)*
17. *Physics*
18. *Xosa or Zulu or Sotho or Tswana*
19. *Biology*
20. *Botany*
21. *Agricultural Science*
22. *French*
23. *German*

Full-time pupils were required to pass the six subjects at one and the same examination and obtain 40% aggregate and not less than 33⅓% in any subject. If one subject was failed it was permissible to re-write it, or another subject in its place, at a subsequent examination.

4.7.4. *The 1945 Handbook of Commercial, Art and General Education Subjects.*

From June 1945 it was required that in the examinations for the National Standard VII Certificate, the National Junior Certificate, the National Intermediate Certificate and the National Senior Certificate, two languages be taken. There were extensive revisions in most syllabuses and courses. At Departmental institutions compulsory courses included three non-examination subjects (1) Religious Instruction (2) Singing and (3) Physical Education.

The National Standard VII Certificate was the new name for what was previously called the Preliminary Commercial Certificate and candidates had still to pass in five subjects:-

Group 1. *First Official Language A (English or Afrikaans)*

Group 11. *One language from:- Second Official Language A or B (English or Afrikaans), French, German, Portuguese, Northern and Southern Sotho, Tsonga, Tswana, Venda, Xhosa, Zulu.*

Group III. Three from:- Arithmetic, Bookkeeping, Business Methods, Civics, Geography, History, Physical Science, Physiology and Hygiene.

It was again stipulated that the certificate and those that follow were recognised by the Public Service Commission and the Railways Administration only if both official languages were endorsed on the certificate.

For the National Junior Certificate six subjects were still required, chosen as follows:-

Group I. First Official Language A (English or Afrikaans)

Group II. One or two from:- Second Official Language A or B (English or Afrikaans), French, German, Portuguese, Northern and Southern Sotho (not to be taken with Tswana), Tsonga, Tswana (not to be taken with Sotho), Venda, Xhosa (not to be taken with Zulu), Zulu (not to be taken with Xhosa).

Group III. Not more than two from (none need be taken) - Agricultural Science, Biology (not to be taken with Botany), Botany (not to be taken with Biology), Chemistry (not to be taken with Physical Science), Geology, Physical Science (not to be taken with Chemistry or Physics), Physics (not to be taken with Physical Science), Physiology and Hygiene.

Group IV. The balance of the six subjects from:- Bookkeeping (not to be taken with Bookkeeping and Commercial Arithmetic), Bookkeeping and Commercial Arithmetic (not to be taken with Bookkeeping or with Commercial Arithmetic), Commerce (not to be taken with Elements of Business), Commercial Arithmetic (not to be taken with Mathematics), Elements of Business, Geography, History, Mathematics, Shorthand speed 50 or 60 words per minute (English or Afrikaans), Typewriting.

The introduction of two shorthand speed tests is noteworthy, also the new subject 'Elements of Business' and the additional language introduced.

The National Intermediate Certificate (standard IX) was re-introduced. Five subjects had to be selected and from June 1945, both official languages were compulsory.

The grouping was, therefore,

Group I. First Official Language A

Group II. Second Official Language A or B

Group III. Three subjects from:- Bookkeeping (not to be taken with Bookkeeping and Business Calculations), Bookkeeping and Business Calculations (not to be taken with

Bookkeeping or with Commercial Arithmetic), Commercial Arithmetic, Commercial Practice, Salesmanship (written and practical), Secretarial Practice, Shorthand Speed, 70 or 80 words per minute (English or Afrikaans), Typewriting.

There were again two groups of Senior Certificate candidates, the general group and the matriculation exemption group. No provision was made to compel candidates to take both official languages as in the previous course, although two languages were made compulsory from June 1947. Hence the grouping for the general group was:-

Group 1. *First Official Language A (English or Afrikaans)*

Group 11. *Not more than three from the following languages of which not more than two Bantu languages:- Second Official Language A or B (English or Afrikaans), French, German, Portuguese, Northern Sotho and Southern Sotho (not to be taken with Tswana), Tsonga, Tswana, Venda, Xhosa (not to be taken with Zulu), Zulu.*

Group 111. *Not more than two (none need be taken) from:- Agricultural Science, Biology (not to be taken with Botany or with Physiology and Hygiene), Botany, Chemistry (not to be taken with Physical Science), Geology, Physics (not to be taken with Physical Science), Physical Science, Physiology and Hygiene.*

Group 1V. *The balance of the six required subjects from:- Bookkeeping (not to be taken with Bookkeeping and Commercial Arithmetic), Bookkeeping and Commercial Arithmetic (not to be taken with Bookkeeping or with Commercial Arithmetic), Commerce, Commercial Arithmetic, Economics, Geography, History, Mathematics (not to be taken with Commercial Arithmetic), Mercantile Law, Shorthand Spped, 90 or 100 words per minute (English or Afrikaans), Typewriting.*

Without going into detail, the matriculation exemption group candidates had their subjects divided into six groups. The first two were language groups and the First Official Language was Group 1 and compulsory. A language from Group 11 had to be taken. Group 111 was a science and mathematics group and one subject had to be selected. Group 1V contained all the Group 11 subjects, Mathematics, History, Geography, Economics and Portuguese. One subject from Group 1V was required. Group V, from which one or two subjects had to be taken included Groups 11, 111 & 1V plus Bookkeeping and Commercial Arithmetic (not to be taken with Bookkeeping or with Commercial Arithmetic), and Commerce. Group V1, from which the balance of the subjects, i.e. one subject, might be taken included Bookkeeping, Commercial Arithmetic,

Shorthand Speed 90 or 100 words per minute (English or Afrikaans), Typewriting, Tsonga and Venda (which latter two languages were not in Group 11).

Candidates were not permitted to take more than four languages. The pass mark per subject had been raised to 40%.

4.7.5. *The 1955 Handbook of Commercial, Art and General Education Subjects.*

There was a handbook published in 1951 but it contained no significant changes from the 1945 edition. In 1955, however, the handbook did make two changes. Not only was the second official language compulsory for the National Commercial Certificate (standard 1X) but also for the National Senior Certificate. In addition English and Afrikaans shorthand (shorthand and snelskrif) were recognised as two separate subjects.

4.7.6. *The 1963 Handbook of Commercial, Art and General Subjects.*

The changes made in this handbook continued the trend towards compulsory bilingualism in the two official languages. (Certain exemptions are granted in the case of immigrants, pupils temporarily resident in the Republic and pupils who have been absent from the Republic for a long period. These will be dealt with later in this chapter.)

The National Standard V11 Certificate was awarded to candidates who passed in five subjects selected as follows:-

Group 1. Afrikaans A or English A

Group 11. Afrikaans A or B, or English A or B, provided it was not selected under Group 1.

Group 111. Three of the following subjects:- Arithmetic (may not be taken together with Mathematics), Bookkeeping, Civics, Commerce, French, Geography, German, History, Mathematics, Physical Science, Physiology and Hygiene, Portuguese.

For the full-time students at commercial vocational schools bookkeeping and commerce were compulsory. Not more than three languages might be offered.

The National Junior Certificate (Standard V111) was awarded to

candidates who passed in at least six subjects selected as follows:-

Group 1. Afrikaans A or English A

Group 11. Afrikaans A or B, or English A or B, provided it was not selected under Group 1.

Group 111. Four of the following subjects:-

(a) French, German, Latin, Portuguese
(b) Agricultural Science, Biology (not to be taken with Botany), Botany, Chemistry (not to be taken with Physical Science), Physical Science (not to be taken with Chemistry or Physics), Physiology and Hygiene, Physics.
(c) Shorthand - 50 or 60 words per minute, Snelskrif - 50 or 60 words per minute, Bookkeeping, Civics, Commerce, Commercial Arithmetic (not to be taken with Mathematics), Geography, History, Mathematics, Typewriting.

Full-time pupils at commercial vocational schools had to take at least three commercial vocational subjects. Not more than four languages might be offered and the maximum number of subjects permitted in Group 111 (b) was two.

A concession was made to pupils who wrote at least six subjects at one and the same examination. If they obtained 40% in each of four subjects, at least 35% in a fifth subject, and a grand total of at least 240 marks in the six or seven subjects, and provided that both official languages were included in the five subjects, they were awarded a five-subject certificate.

The National Commercial Certificate (Standard 1X) was brought back again (for a short period as will be seen) but required passes in six subjects instead of the five previously asked for.

Group 1. Afrikaans A or English A

Group 11. Afrikaans A or B, or English A or B, provided it is not taken under Group 1.

Group 111. Four of the following subjects:-
Shorthand - 70 or 80 words per minute, Snelskrif - 70 or 80 words per minute, Bookkeeping, Commerce, Commercial Arithmetic (not to be taken with Mathematics), Economics, Mathematics, Mercantile Law, Typewriting.

The same rules applied to full-time pupils in standard 1X at commercial vocational schools in respect of non-examination subjects, the number of commercial vocational subjects to be taken and the five-subject certificate, as applied to standard V111 pupils.

The National Senior Certificate (Standard X), Commercial and General Group, was awarded to a candidate who passed in at least six

subjects, selected as follows:-

Group 1. *Afrikaans A or English A*

Group 11. *Afrikaaans A or B, or English A or B, provided it was not taken under Group 1.*

Group 111. *Four of the following subjects:-*

(a) French, German, Latin, Portuguese, Northern Sotho - lower (might not be taken with Southern Sotho or Tswana), Southern Sotho - lower (not to be taken with Tswana), Shona - lower, Tsonga - lower, Tswana - lower, Venda - lower, Xhosa - lower (not to be taken with Zulu), Zulu - lower.

(b) Biology (not to be taken with Botany), Botany, Physical Science (not to be taken with Physics or Chemistry), Chemistry, Physics, Geology.

(c) Shorthand - 90 or 100 words per minute, Snelskrif - 90 or 100 words per minute, Bookkeeping, Commerce, Economics, Mercantile Law, Typewriting.

(d) Agricultural Science, Commercial Arithmetic (not to be taken with Mathematics), Common Law, Criminal Procedure, Geography, History, Introduction to Criminology and Ethnology, Mathematics, Physiology and Hygiene, Statute Law.

For full-time pupils in standard X at commercial vocational schools the same rules applied in respect of non-examination subjects, the number of commercial vocational subjects to be taken and the five-subject certificate, as applied to standard V111 and 1X pupils.

The maximum number of languages permitted was four and the maximum number of subjects permitted under Group 111 (b) was two.

The full list of subjects that were allowed for the Senior Certificate (Matriculation Exemption) will not be given here having been dealt with in Chapter 11, but only those that affected the commercial high schools because pupils in these schools had to take three commercial vocational subjects and both the official languages. Hence their choice was not very wide.

Group 1. *Afrikaans A or English A*

Group 11. *Afrikaans A or B, or English A or B (provided it was not taken under Group 1.)*

Group 111. *Mathematics*

Group 1V. *Economics*

Group V. *Two of the following subjects:-*
Shorthand - 90 or 100 words per minute, Snelskrif - 90 or 100 words per minute, Bookkeeping, Commerce, Mercantile Law, Typewriting.

A full-time candidate had to sit for a minimum of six subjects at one examination, obtain a grand total of at least 270 marks in six or seven subjects, obtain at least 40% in each of the subjects in

Groups 1 - 1V, and obtain at least 35% in one or two of the remaining subjects.

4.7.7. Basic Syllabuses and the 1968 Handbook of Commercial and General Subjects.

In Chapter 11, paragraph 2.15.4., the reasons for the introduction of basic (core) syllabuses were given. New syllabuses were drawn up for most commercial subjects. Bookkeeping became known as Accountancy, Physiology and Hygiene changed its name to Physiology and Health Education, but generally speaking the conditions for the award of certificates remained unchanged. The National Commercial Certificate changed its name again and became the National Intermediate Certificate.

A new handbook was issued for the standards V1, V11 and V111 examinations but one has not yet been issued for the standard 1X and X examinations. It draws attention to the fact that history is a compulsory subject in commercial high schools in standard V111.

4.8. Exemption from the Second Official Language.

In examinations controlled by the Department of Higher Education immigrant children who have had no chance to learn either English or Afrikaans may be exempted from the necessity for taking both official languages but in place of the language on the B level from which they are exempted they have to offer another language recognised by that department. [1]

In examinations controlled by the Cape Education Department the child of an immigrant who has not had at least two years' instruction in both official languages in the primary course may be exempted from the requirement of having to pass in a second official language but must offer either Latin, Greek, French, German, Hebrew, Southern Sotho, Tswana or Xhosa.

This rule applies also to children who are temporarily resident in the Republic (children of Royal Naval Personnel who have to take French instead of Afrikaans and children of members of the diplomatic corps who have to take a modern language in lieu of one of the official

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1. Letter from Department of Higher Education to Cape Education Department dated 9.12.69.

languages). Where a South African child has been away from the Republic for a long period, exemption is considered on merit by the Director of Education. [1]

4.9. Differentiation in the Commercial High School.

In Chapter 11 the M and T streams were discussed and also the possibility of a third stream for the standard V111 leaver dealt with. In Chapter 111 it was shown that an A and a B course existed. In both the technical high school and the housecraft high school there is, therefore, some measure of differentiation. This is not apparent in the commercial high school unless the possible groupings of subjects are analysed. Possibly the best way to show this is to tabulate the groupings:-

University Entrance Course	Shorthand-Typists' Course	General Commercial Course
1. Standard V111		
Afrikaans	Afrikaans	Afrikaans
English	English	English
Accountancy	Accountancy	Accountancy
Commerce	Commerce	Commerce
History	History	History
Mathematics	Shorthand	Typewriting or
Typewriting	Typewriting	Commercial Arithmetic
2. Standards 1X and X		
Afrikaans	Afrikaans	Afrikaans
English	English	English
Accountancy	Accountancy	Accountancy
Commerce	Commerce	Commerce
Typewriting (Optional)	Typewriting	Typewriting
Mathematics	Shorthand	Mercantile Law or
Economics	Snelskrif	Commercial Arithmetic
		Economics

It will be noticed that there are four subjects (excluding history in standard V111) which are common to all groups - Afrikaans, English, Accountancy and Commerce. In very many cases, too, typewriting can be added. Thus it is possible not only to differentiate in the optional subjects but, because the schools are usually large and therefore the number of classes also large, it is also possible to differentiate in the speed and method of approach to any one subject. This is, in fact, commonly done.

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1. Education Gazette. 6.2.69.

4.10. Teachers of Commercial Subjects.

There is a qualification known as the National Teachers' Diploma (Commerce) offered by the Cape Town College for Advanced Technical Education, the Natal College for Advanced Technical Education and by the Pretoria College for Advanced Technical Education. The minimum admission qualification is the National Senior Certificate or any equivalent certificate. There are full-time and part-time courses.

For full-time students there are three courses:-

1. Course A.

This is a 3-year course for students in possession of the National Senior Certificate or its equivalent. The prescribed subjects fall into four groups:-

Group 1. Afrikaans A or B (written), English A or B (written), Afrikaans (oral), English (oral).

Group 11. Educational Psychology, History of Education, Educational Principles and Teaching Methods, Subject Method (in at least two major subjects), School Hygiene and First Aid, Practical Teaching and Blackboard Work, Practical Teaching (150 hours).

Group 111. Five subjects from the following, of which at least two shall be taken as majors and the remaining three as minors:- Accountancy, Commerce (compulsory at least as a minor), Commercial Arithmetic and Statistics, Mercantile Law, Economics, Shorthand, Snelskrif, Typewriting.

Group 1V. Credit and non-examination subjects:- Physical Education and Sports Coaching, Cultural Activities and Religious Instruction.

2. Course B.

This is a 2-year course for non-graduates holding a recognised teacher's certificate for which the prescribed course is of not less than two years' duration [1] and for which the entrance qualification is Matriculation, Senior Certificate or an accepted equivalent.

Group 1. Official languages.

Group 11. Practical Teaching and Blackboard Work, Practical Teaching (100 hours).

Group 111. As for Group 111, Course A.

Group 1V. As for Group 1V, Course A.

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1. In view of the fact that most non-graduate courses of teacher training are now of three years' duration, this provision will probably have to be reconsidered.

3. Course C.

A one-year course for holders of a recognised university degree in Commerce or the Chartered Accountants' qualification, or any other degree plus the National Diploma in Commerce, or a professional diploma in Commerce or in Accountancy.

Group 1. As for Group 1, Course A.

Group 11. As for Group 11, Course A. but Practical Teaching (100 hours).

Group 111. Three subjects chosen from Group 111, Course A, to be taken as minors.

Group 1V. As for Group 1V, Course A.

The Part-time Course.

Admission to the part-time course is restricted to candidates who have obtained -

(a) the National Senior Certificate or an equivalent qualification; and

(b) a degree in Commerce, the Chartered Accountants' Certificate or the National Diploma in Commerce which includes the two official languages and at least three commercial subjects, or an approved professional certificate in Commerce or Accountancy; or the Diploma in Public Service Accounts and Auditing (one of the three minor subjects under Group 111 must be a major subject); and

(c) have at least two years' approved business experience. Full-time teachers are exempted from (c) and may register immediately. Other candidates must have been registered for at least two years before they may sit for the final examination in Educational Psychology and Educational Principles and Teaching Methods. The preliminary examination in Educational Psychology must be passed by candidates at the end of the first year and only candidates who pass will be allowed -

(i) to enter for the final examination in Educational Psychology;

(ii) to enter for the examination in Educational Principles and Teaching Methods;

(iii) to undergo the practical teaching test at the end of the final year.

In order to qualify for the award of the Teachers' Diploma, candidates must pass in the subjects set out hereunder:-

Group 1. As for Group 1, Course A.

Group II. Educational Psychology (Preliminary and Final), History of Education, Educational Principles and Teaching Methods, School Hygiene and First Aid, Practical Teaching and Blackboard Work, Practical Teaching (100 hours).

Group III. (a) Three of the following to be taken as minors:- Accountancy, Commerce, Mercantile Law, Economics, Commercial Arithmetic and Statistics, Shorthand, Snelskrif, Typewriting.

Candidates who are in possession of the National Diploma in Commerce need only follow the second year course in each of the chosen minor subjects, i.e. no examination need be written in the first year course.

(b) The three corresponding subject method courses must also be followed and the examinations be written at the end of the second year or upon completion of the course. [1]

4.11. The Demand for Full-time Commercial Education.

In the introduction to this chapter some idea of the demand for pupils from commercial high schools was given. In presenting a brief survey of the evolution of the twelve existing commercial high schools in the Cape Province, it has been indicated that in most schools the demand for places far exceeds the accommodation potential of the schools. This is true in every case except that of the Midlands Commercial High School which has room for many more pupils at the present time. This position, however, is not likely to last long when it becomes more generally known that accommodation is now available in a very fine new school.

The problem which confronts the Cape Education Department today, is what to do about this accommodation shortage. Where it is possible to extend the buildings this is being done. Where new schools are being built they are being given plenty of accommodation and, if this accommodation is for less than 750 pupils, provision for extension to this figure is being made.

There are two possible solutions. The first is to build more commercial high schools and the second is to persuade the Minister of National Education to allow full commercial high school courses to be

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1. All information extracted from the Handbook of National Teachers' Diploma Courses, 1968.

given in the so-called academic high schools. There are problems attached to the second solution because in the academic schools which offer some commercial subjects at present, the approach to the subjects is not as vocational as that in the commercial high schools. The demand from industry and commerce is for pupils who are sufficiently well trained to hold down a post immediately they are employed. It would appear that some serious re-planning of courses in these schools will have to be undertaken if the second solution is the one adopted.

The whole question of vocational education for the platteland presents another type of problem which will be discussed in a later chapter but it may be mentioned here that the Minister of National Education has now given permission for pupils from twelve academic schools, from a list of forty-eight submitted to him, to offer three commercial subjects for Senior Certificate purposes. These are schools remote from existing commercial high schools and are situated in Aliwal North, Beaufort West, Calvinia, De Aar, Kokstad, Mafeking, Piketburg, Ugie, Umtata, Vaalharts, Vredenburg and Vryburg. It is hoped that the list will be added to in the near future. There is, however, still some difference between even these twelve schools and a commercial high school because an ordinary academic school pupil may offer only six subjects for Senior Certificate whereas one from a commercial school is permitted to offer seven.

4.12. Overlapping of Functions of Commercial and Academic High Schools.

In Chapter 1 under the sub-heading 'Differentiation in Secondary Education' this question of both academic and commercial high schools offering commercial subjects was discussed to some extent. It was mentioned that at one stage provincial schools were not allowed to devote more than three-eights of the ordinary school time to vocational and allied subjects, which arrangement did not allow sufficient scope for differentiation. Then Mr. H.S. van der Walt, the Secretary for Education, was quoted when he sketched very briefly the trouble that was being caused by attempting to distinguish between vocational subjects

and general educational subjects. He said that several inter-departmental committees had been appointed from 1911 onwards to try to formulate a definite distinction. He mentioned the Eybers Committee of 1940, on which eminent educationists served. [1] Dr. Eybers was the Professional Assistant of the Union Education Department and he was appointed as chairman of this committee by the Committee of Heads of Education Departments.

The terms of reference of this committee included:

" 1. The most suitable time for pupils to start on their vocational or pre-vocational training, having regard to their age, standard of education reached, and the demands of apprenticeship;

2. the most suitable institution, i.e. the ordinary secondary school, the departmental vocational school or technical college, at which such education ought to be provided;

5. the relations between technical colleges and the provincial high schools in respect of commercial education." [2]

With regard to the terms of reference quoted above, the Committee's points of view and recommendations were:-

"V. The Committee draws a clear distinction between <u>schools</u> offering individual subjects of a vocational nature as part of a general cultural curriculum (i.e. provincial schools), and <u>institutions</u> offering full vocational courses as specific training for employment (i.e. institutions under the Union Education Department).

VI. The Committee is strongly of the opinion that vocational education for a specific trade and for home-making or for any 'specific' work, should not commence before a pupil is 14 years of age, but is aware that exceptions will have to be made in certain well-defined cases.

X. Vocational education should be provided at institutions under the Union Education Department. Pre-vocational education, on the other hand,

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1. Dr. H.H.G. Kreft, formerly Director of Education, Transvaal; Dr. S.H. Pellissier, formerly Director of Education, Orange Free State and Dr. W. de Vos Malan, formerly S.G.E., Cape Province.
2. Interdepartmental Committee to report upon the Demarcation of the Activities of Technical Colleges, Trade Schools and High Schools. Union Department of Education. E53/7/15 of 29/5/40. p.1.

should be the function of the provincial education authorities.

XIII. The Committee draws a clear distinction between a full commercial course and a general cultural course including commercial subjects.

XIV. The Committee considers that this full commercial course should extend over four or five years (depending on the primary school leaving standard) and commence after the primary school stage. The Committee further recommends that such courses be given in commercial high schools attached to technical colleges, and that these schools should not be conducted at centres where there is insufficient demand for them, but that the demand for commercial education at such centres should be met by the establishment of Departments of Commerce to which admission is ex standard VIII." [1]

It is obvious from these extracts that Mr. van der Walt was correct in his assessment, in this instance at least, that all that the Eybers Committee had done was to acknowledge that there was a difference between vocational and non-vocational subjects particularly in the field of commercial education. The difference between vocational and pre-vocational subjects is even less clearly definable. He himself said that in the case of subjects which overlap "It is a matter of scope, nature and approach". [2]

The de Villiers Commission recommended a junior high school as a sort of clearing house. It was to offer a three-year post primary full-time general education "uncompromisingly child-centred" in that pupils' interests and abilities would be discovered and by the use of systematic vocational guidance the pupils would be directed to further study or to employment. The curriculum was to consist of English, Afrikaans, arithmetic and elementary mathematics, general science, social studies, practical arts, music and art appreciation, physical education, religious instruction and singing. These were not to be considered as subjects but as "fields of study" or broad "areas of activity", the

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1. *Ibid. pp. 2 and 3.*
2. *Annual Report of the Department of Education, Arts and Science, 1952. Op cit. p.12.*

teacher being given the utmost measure of freedom to plan a set of learning situations adapted to the needs and achievement levels of individual pupils or groups of pupils. The basic studies were to be the first and second languages together with arithmetic and elementary mathematics. In respect of each of these a scheme of diagnostic and remedial instruction and testing was to be evolved.

It is seen then that there was no specialisation until after the Junior High School course, i.e. in the majority of cases until the age of 15. [1] *In some branches of vocational education this would not have been a very acceptable suggestion because of the length of pre-vocational training required. In commercial education, with which this chapter is concerned, this situation is not so serious because a good grounding in the languages and in arithmetic is virtually a necessity. The disadvantage as far as commercially-directed education was concerned would have been to pre-determine the ability in "skill" subjects like shorthand and typewriting. (However, this situation obtains in many cases today.) "Commerce demands of its employees that degree of skill, that knowledge of language and that mastery of general and vocational subjects which will enable them to function efficiently, firstly as human beings dealing with other human beings, and secondly as employees with a background of specialised knowledge enabling them to carry out the work of the organisation in which they are employed."* [2] *This quotation sums up the situation in respect of the employers' demands from commercially trained pupils and it is necessary to keep it in mind when discussing such aspects of this type of education as when it should begin and where it should be given.*

To return to the history of the overlapping of functions, in September 1951, the Committee of the Heads of Education Departments, after exhaustive discussion, adopted the following basis:-

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1. de Villiers Report. Op cit. pp.43-48.
2. Ibid. p.125. Paragraph 955.

"(i) As a general rule the departmental commercial high schools, State-aided commercial high schools and technical colleges shall admit only pupils who have successfully completed standard VIII, provided that they may be admitted earlier on advice of a vocational guidance officer and/or on grounds of age and home circumstances.

(ii) The provinces shall ensure through their vocational guidance services or where parents insist thereon, that children who have chosen commerce as their career at the stage referred to in paragraph (i) above, shall be afforded the opportunity to proceed to State or State-aided institutions under the Department of Education, Arts and Science."[1].

The next attempt to demarcate functions was made in August 1953. The portion which dealt with commercial education was -

" (b) Admission of pupils from provincial schools to full-time commercial training in schools of the Department of Education, Arts and Science and technical colleges:

(i) in general pupils after standard VIII are admitted;

(ii) pupils may, however, be admitted if they have passed standard VII, are 15 years old when admitted and if the parent has applied in the prescribed way." [2]

This arrangement was tentative for two years while the whole question was being re-investigated. As far as the prescribed procedure referred to was concerned, the parent had to write to the principal of the school in which the pupil was during the first six weeks of the last school term. The principal could not refuse the transfer and the principal of the new school could not admit the pupil without the necessary transfer card.

This attempt at a solution to the problem did more harm than good because it created much confusion and in addition caused much bad feeling between principals of provincial and departmental schools.[3]

In 1955 the Vocational Education Act, No. 70 of 30th. September, 1955, was passed and a further attempt was made to demarcate the functions

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1. Annual Report of the Department of Education, Arts and Science, 1952. Op cit. p.12.
2. Circular minute, Department of Education, Arts and Science, 29th. August, 1953. p.1.
3. Schools controlled by the Department of Education, Arts and Science.

of the two types of schools in a clearer way. Unfortunately, the provincial education heads and the Secretary of the Department did not reach an agreement. One reason was that no attempt was made to define vocational education. The increasing popularity of junior secondary courses of general education with a vocational bias had led to some confused thinking about the meaning and implications of vocational education. Some important considerations were being lost sight of. For example, it is not only the time devoted to a vocational subject which is a determining factor but also the special equipment, apparatus and machinery necessary to make the teaching effective.

One of the reasons for the introduction of the Vocational Education Act of 1955 was to clarify the functions of the provincial and departmental schools. Since the definitions given have largely been taken over in the 1967 Act, they will not be repeated here. They appear in Chapter 1, but Mr. van der Walt wrote that there was now a proper distinction between vocational and general education.[1]

In the 1958 report of the Department of Education, Arts and Science it is noted that this Act was amended to allow provincial schools, subject to the approval of the Minister, to offer a third vocational subject in centres where no departmental commercial high schools existed. The total number of hours which might be devoted to commercial subjects in provincial schools was not to exceed 10 hours per week. [2]

The Examinations Officer of the Cape Education Department says that no schools in this Province took advantage of this offer [3] *and this is confirmed by the portions of section 8 of the "Instructions Regarding the Senior Secondary Course and Senior Certificate Examination" which read –*

(i) Not more than two commercial subjects may be taken ..... .

(k) Not more than eight hours per week in all shall be devoted to instruction in commercial subjects ..... ." [4]

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1. *Department of Education, Arts and Science. Annual report for 1955. p.7.*
2. *Department of Education, Arts and Science. Annual report for 1958. p.1.*
3. *Interview on 4th. September, 1970.*
4. *Senior Secondary Course. Pamphlet E322/0/1965. p.8.*

Why did these regulations made under the authority of Act No. 70 of 1955 cause such dissatisfaction in the provinces? There would appear to be two reasons. The first is, taking the position as it exists today, that pupils are admitted to the academic schools after passing standard V and a certain number complete standards V1 and V11 and then leave the school to enter a commercial high school. Hence the standard V111, 1X and X classes are not carrying their full quota of pupils. In some centres this means that pupils who would have stayed for five years for a normal academic course have been excluded from a school in which they wished to enrol because of a shortage of accommodation for standard V1 and V11 pupils.

The second reason is that a girl who wishes to take shorthand or snelskrif as a major subject is virtually compelled to take typewriting as a major subject, otherwise she will not be in a position to compete with girls from commercial high schools for a position as a shorthand-typist. This then rules out the possibility of her taking accountancy or commerce or any other commercial subject.

Some sort of compromise has been tried, and will continue to be used except in the twelve centres mentioned earlier which will be offering three commercial subjects. Minor courses were introduced in shorthand, snelskrif, typewriting, accountancy and commercial mathematics. Shorthand (minor) plus snelskrif (minor) plus typewriting (minor) can be offered as the equivalent of two major subjects. Similarly accountancy (minor) may be taken with either commercial mathematics (minor) or typewriting (minor) as one major subject. These compromises have never been regarded as entirely satisfactory because the standard attained is not as high as that in a major subject.

Here then is the history of the overlapping of functions of provincial and commercial high schools. Whilst the two types of schools were under the control of different authorities, there was, understandably, some measure of competition, a desire for status and

a good deal of jealousy. Now that divided control no longer exists it is difficult to understand why any form of restriction should be placed on curricula, but this is a matter for more detailed discussion in Chapter X.

CHAPTER V

The Agricultural High School

5.1. Background

5.1.1. The 17th Century

When Jan van Riebeeck and part of his expedition dropped anchor in Table Bay on Saturday, 6th. April, 1952, [1] there was no intention in his mind, nor in the minds of the Council of Seventeen, to do more than to ensure the safety of the ships of the Dutch East India Company and to provide them with fresh produce. [2] He was to grow vegetables and fruit, secure a supply of fresh water, build a small fort, erect a flag mast to signal ships and build pilot boats. The small company to do all this was originally intended to be eighty men, but was actually ninety, and they were instructed to remain at peace with the native inhabitants and any foreign subjects who might settle at the Cape. The fresh meat was to be obtained by trading with the Hottentots but this was not always successful, so that the Company started its own herds of cattle and sheep to supplement the supplies.[3]

In 1657 the commander persuaded the directors of the Dutch East India Company to allow a few of their servants to take their discharge and become free burghers farming on land alloted to them by the commander. It was hoped that this would increase production at no expense to the Company. It was not intended to be an attempt at colonization and strict control was exercised over these free burghers. They were compelled to produce only what the Company needed and this had to be sold to the Company, no trading other than this being allowed. It was not long before these colonists - for that is what they were - began to assert their rights as freemen by protesting against restrictions and demanding that their interests as well as the Company's interests should be considered.[4]

In the same year as the free burghers were granted farms, the first slaves arrived in South Africa from Java and Madagascar. Regular

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1. Muller, C.F.J., Professor of History, University of South Africa, Editor. "Five Hundred Years. A History of South Africa". Pretoria. Academica. 1969. The Drommedaris and the Goede Hoop arrived on 6th. April, the Reyger on the 7th. April, and the Walvis and the Oliphant on the 7th. May, 1652. p.16.
2. Ibid. p.17.
3. Leo Marquard. "The Story of South Africa" London. Faber & Faber. 1954. p.35.
4. Ibid. p.35.

importation of slaves followed. Soon these were doing all the unskilled and some of the skilled work at the Cape. [1]

The implications of the creation of a class of free burghers and the importation of slaves were, that what was intended to be a small refreshment station at the Cape, began to expand and grazing land, hitherto regarded by the Hottentots as their own, was occupied by Europeans.

The war between Holland and England which broke out in 1665 and that between France and Holland which began in 1672, convinced the Dutch that the real value of the Cape was its strategic position. Hence the Dutch East India Company decided on a policy of increasing the free burgher population.

The object was still not colonization but to produce as cheaply as possible the meat, corn, vegetables and wine needed for the ships and to maintain at as low a cost as possible the manpower to defend the Cape.

After ten years at the Cape, van Riebeeck was promoted and went to the East Indies. Later, Simon van der Stel was appointed as commander at the Cape. He saw the potentialities of the Cape as a colony and induced artisans on their way to India to settle at the Cape. He made Dutch and German settlers welcome. Company's servants were encouraged to take their discharge and settle at the Cape as free burghers. He established a new community at Stellenbosch, thirty miles from Table Bay, and granted farms in freehold there. More farms were granted at Drakenstein and Paarl. By 1688 the burgher population had grown to 600.

In that year, as a result of the persecution of the Huguenots in France, some of these fled to South Africa. Between 1688 and 1690, the total number of refugees from France was not more than 200, [3] but they became free burghers and farmers.

5.1.2. The 18th. Century.

Willem Adriaan van der Stel succeeded his father Simon in 1699.

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1. Ibid. p.36.
2. Ibid. p.43.
3. Ibid. p.44

He was arrogant, ambitious, greedy and dishonest but he did much to improve stock farming and agriculture at the Cape. [1] He was eventually dismissed from the service of the Company. When he left in 1708, there were 1 700 men, women and children belonging to the free burgher class. [2]

The policy of the Company in regarding the Cape as merely a place to supply the needs of Holland was not the only factor which determined the way the Cape developed. Apart from the narrow coastal strip with its good winter rainfall, once the mountains are crossed there is a semi-desert with a fickle summer rainfall over the western half of South Africa which makes it essentially sheep and cattle country. In the early days of van Riebeeck and van der Stel the immigrants could, for the most part, be accommodated on farms in the winter-rainfall area and produce corn and wine. Even they found that the restricted Cape market and the low prices fixed by the Company kept them impecunious and so they resorted to the more profitable keeping of cattle runs beyond the Hottentots Holland Mountains. Indeed the Company had done the same. So it was that, the farming of corn and wine becoming an overcrowded and unattractive occupation, the younger sons crossed the mountains to hunt and to keep stock, travelling ever further away from government and civilisation. The Company would no longer give farms freehold but compromised by allowing anyone to occupy a farm of about 3 000 morgen on payment of a very small quit rent. These farms were called loan farms. [3] So far from stopping the trekking, this system encouraged it. Farms were easily obtained and easily left; the quit rent was quite often unpaid and the Company not informed of the change. These conditions militated against permanent settlement on farms, the building of proper houses and the cultivation of fields. These trekboers were becoming a semi-nomadic race which, economically, was a successful adaptation to the conditions, but they developed characteristics quite peculiar to themselves. They became hardy, independent and self-reliant.

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1. Ibid. p.45.
2. Ibid. p.47.
3. Ibid. pp. 52 and 53.

"His freedom was anarchic, not the disciplined freedom of Western Europe, and his individualism was that of the frontier, not that of democratic society. His freedom and his individualism were bred in isolation, far from the settled society in which a man's rights are limited by the rights of his neighbours." [1] The trekboer developed an attitude to land which he passed on to his children: that there was plenty of land and that it was the natural right of a white man to own a farm.

The isolation of these people left them outside the stream of European civilisation. They had no part in such culture as there was in the settled districts. They did, however, and this was important, keep their Calvinistic religious beliefs. The social life of stock farmers, trekboers and hunters was by the standards of Cape Town and Stellenbosch, rough, hard and uncouth. The trekkers and the hunters lived in their wagons. On stock farms, houses of rough timber, stone and thatch with mud floors were built. The furniture was crude and home-made. As the eighteenth century wore on, better houses were built but good furniture, crockery and cutlery and even kitchen utensils, remained exceptional. [2] Clothes were home-made. Leather was used skilfully to make coats, trousers and velskoene. Soap, candles, grease and bullets were all home-made.

In Cape Town there were a few private elementary schools but the trekboers and frontiersmen had no educational facilities. Sometimes a retired or runaway soldier wandered from farm to farm, spending two or three months at each place teaching the children to read and write. Mothers taught their children to read and to memorise the Bible. Children learnt enough to be admitted as members of the Church and their contact with books was limited to the Bible and a metrical version of the Psalms.

Many of these people attended Church only on the occasion of the quarterly Sacrament and usually remained for a few days in the village

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1. Ibid. p.53.
2. Ibid. p.68.

to attend weddings and christenings and to receive some religious instruction. There was shopping to be done and pleasures to be indulged in which would be unavailable for the next quarter.

5.1.3. The 19th. Century

It is seen then that the roots of this system of semi-nomadic life were put down in the eighteenth century and when efforts were made in the nineteenth century, particularly in the second half of this century, to provide education for the rural communities there were tremendous obstacles to be overcome. The farmers had lost touch even with elementary education and children were growing up to regard secular learning as unnecessary. The fact that the Bible was read was not now as satisfactory a way of teaching reading as hitherto because, even by the end of the eighteenth century, the language of the farmers of South Africa already showed considerable differences from the Dutch spoken in Holland. On the other hand, the children received an excellent practical education in helping with the building of houses, the making of furniture and of clothes and the preparation of food. There was a tendency among the more wealthy, however, to lead grossly sluggish lives because so much of the work was done by slaves, Free Blacks and Hottentots.

The schools provided in Cape Town were not much patronised by the farmers but a few used to board their children in villages so that they might acquire some rudiments of education. Some, as has been indicated, engaged itinerant schoolmasters (who were often that in name only). The position was a source of great concern to the Cape Colonial Government which decided to establish district boarding houses from 1873.

These were State-aided, and the grants made to them were to be used exclusively -

1. for part payment of the teachers or the superintendents of the boarding departments;
2. for the training of the pupils in industrial habits; and
3. for the part maintenance of pupils in need of financial assistance.

The annual grant to a boarding school did not exceed £50 towards the industrial department for boys and £10 for girls.

This particular system did not prove very successful and, in fact, the largest number in operation was in 1881 when there were eleven boarding schools and thirty-two boarding departments. By 1909 only two were still in existence. The reasons were not difficult to find. Very few rural areas were able to give adequate financial support to a boarding school or to contribute sufficient pupils to justify satisfactory boarding accommodation or the employment of specialist teachers.

The other reasons are not so easy to understand. The provision of industrial education did not meet with the approval of the majority of farmers who considered that their children would receive enough of this on the farms out of school hours. In addition, the overwhelming majority of farmers regarded scientific methods of agriculture with suspicion and as an almost certain cause of bankruptcy.

It was virtually impossible to obtain industrial teachers and so we find that the reports from these boarding schools, for the most part, made no mention of industrial work. [1]

A further proof of the interest of the Colonial Government in this matter of agricultural education is found in the report of the 1879 Education Commission, under the chairmanship of Sir John Henry de Villiers, Chief Justice. It recommended in paragraph XXXI that school boards should be empowered to extend the industrial agencies attached to them by forming small model farms and by practical instruction in agriculture. The idea apparently was that the time was not yet ripe for the establishment of agricultural colleges but that agricultural departments ought to be started. Paragraph XXXVII recommended free education for the impoverished.

The Cape Legislative Assembly recommended in 1889 an enquiry into the question of the provision of higher and technical education for the rural population. In a special report submitted by the Superintendent-General of Education it was suggested that after a boy had satisfied

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1. *M.E. Martinius. "A sketch of the development of Rural Education (European) in the Cape Colony (1652-1910). Grahamstown. Grocett and Sherry. pp. 24-64.*

the inspector of a standard of general attainment, he should go on to an agricultural, viticultural or commercial school and that bursaries should be given for those in necessitous circumstances. Little seems to have come of this scheme but the enquiry is significant in that it showed the increasing interest in scientific methods of agriculture.

The commission appointed in 1891 under the presidency of Sir Jacob Dirk Barry, Judge President of the Eastern Districts Court and referred to in Chapter 11, reported thus: "And not only must we lay our plans to catch the technical educates of the future while they are yet young, but we shall certainly have to feel our way as we go. Apart from the wine-making and from the agricultural and pastoral industries and their important and promising adjunct of fruit-culture and fruit preserving, our people have made little sign as to the direction in which they are likely to specialise themselves industrially. For the promotion of the higher agricultural industries there are already established two technical schools, a good one at Somerset East and perhaps a better one at Stellenbosch; and the only danger which appears to be hanging over these schools is the danger of inanition, not from want of funds or of teaching power, but from want of students." The report went on to define the branches of agriculture which needed attention in schools e.g. fruit preparation (culture, drying, canning, preserving and packing), bee-keeping, poultry-keeping, budding, grafting, planting, pruning and the preparation of leather, all of which might be handled, it thought, in village technical schools. [1]

The 1893 educational survey of the Colony indicated that very many farm children were not receiving adequate education and that there was much poverty in the rural areas. As an example, Inspector Murray, who surveyed the Jansenville area, reported that there was a large class of Poor Whites and that amongst them there was degradation, deterioration of race, and crime. [2] The sub-division of farms into little more than

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1. Education Commission. Cape Province. 1891. Op cit. p.36.
2. "A sketch of the development of Rural Education (European) in the Cape Colony (1652-1910)." Op cit. pp. 85 & 86.

plots has already been mentioned in Chapter 1. There was intermarriage, the bywoner system and, in general these Poor Whites were physically and mentally degenerate and with no tradition of steady and consistent hard work. This was a class of people very difficult to touch and improve by education.

From all over the Colony came reports that suitable buildings were difficult to obtain, that there were some incompetent teachers - "discharged soldiers, sailors, ex-officers, disrated attorneys, unfrocked clergymen and business failures". [1] *There were deep-rooted prejudices to counteract. All the investigations indicated the need for sound elementary education followed by some industrial education.*

5.1.4. *The 20th Century*

Some progress was made and in 1902 it was reported that there were nine industrial schools in the Colony, some of which took some form of agriculture as a subject; [2] *but there was as yet no co-ordinated effort to establish agricultural secondary schools. Some of the reasons for this have been stated in section 5.1.3. of this chapter. To recapitulate briefly they were the opposition of the farmers to any form of scientific farming methods, the belief that farming was best learnt by practising farming on the home farms and the great difficulty of obtaining qualified teachers.*

It must also be remembered that few pupils progressed beyond standard V or VI, particularly in rural areas, as has been shown in Chapters II and III, so that the time was not yet ripe for the introduction of agricultural secondary education. Nevertheless, it is surprising that in a country which was still so predominantly agricultural that this form of industrial education should have been the last to develop. The Boer War of 1899-1902 proved a serious interruption.

Act No. 35 of 1905 divided the Colony into school districts and

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1. Ibid. p.89.
2. Refer Chapter II.

created School Boards but these boards had no power of founding industrial schools and to this day, all types of vocational schools have their own school committees and do not fall under school boards.

The Cape Education Commission (1910-1912), sometimes called the Fremantle Commission, again stressed the need to develop industrial and technical education and in its report we find that there were still agricultural courses at Adelaide, Uitenhage and Worcester for boys and at Tulbagh for girls, but these would probably be better described as gardening courses than agricultural courses.

5.2. The Period 1911-1925

5.2.1. Introduction

In the period immediately following Union there was a good deal of departmental uncertainty and overlapping. According to Adriaan Smuts, the Provincial Administrations appeared to be uncertain as to whether they were to make any provision for agricultural education. A circular to Provincial Secretaries dated 22nd. May, 1913, clarified the position. The Union Government would continue to conduct agricultural education as provided at the Agricultural Colleges and at any future institutions of a similar kind. The Provincial Administrations were to control and provide for all expenditure connected with agricultural education as far as it could be considered parallel to industrial education i.e. the training of youths as farm labourers, overseers or smallholders. [1]

(It should be noted that the Union Department of Agriculture proceeded between 1910 and 1921 to establish five agricultural institutions (later called colleges) - Elsenburg, Grootfontein, Cedara, Glen and Potchefstroom - which provided various types of courses in agricultural education. The entrance standard was Junior Certificate if the applicant was 16 years of age or, if he had had previous experience in farming, if he was 18 years old. According to Pells, the attendance was disappointingly small. The age of entrance, the academic

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1. "The Education of Adolescents in South Africa" op cit. p.94.

standard and the fees demanded made the schools ineffective as a means of providing the mass of the rising generation of farmers with an agricultural education. As centres of adult agricultural education, however, they proved to be excellent. Staff members travelled in the surrounding districts giving lectures, interviewing, discussing problems, giving advice and explaining the results of experiments that had been brought to a successful conclusion at the Agricultural Colleges. These showed the way to better methods and more productive crops. The vacation courses were well attended both by farmers and their wives (who studied poultry farming and dairy farming). [1])

5.2.2. The 1916 Bloemfontein Conference on Industrial Education

A conference on Industrial Education was held in Bloemfontein on 6th and 7th. September, 1916. Part (e) of the report dealt with agricultural instruction, and the findings may be summarised as follows:-

(a) For South Africa, vocational instruction in the principles of agriculture is as of as great importance as training in handicrafts.

(b) Provision should be made in all rural schools for teaching these principles.

(c) Teaching in primary schools might be undertaken by itinerant teachers.

(d) Special provision should be made for the training of teachers for this branch of education.

(e) There is a great demand for farm overseers and therefore extended opportunities for training in intensive agriculture. Hence liberal provision should be made for the establishment of industrial school farms.

5.2.3. Dr. W.J. Viljoen's Work for Agricultural Education.

One of the great advocates of agricultural education was Dr. W.J. Viljoen who became Superintendent-General of Education in the Cape in 1918 after having been Director of Education in the Free State. It was his view, writes Dr. P.S. du Toit, that curricula must pay more attention to the apparent needs of the majority of the pupils. At this

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1. "The Story of Education in South Africa." Op cit. p.100.

time only ten per cent went to a university and yet the other ninety per cent had to follow the same courses. Dr. Viljoen's view was that courses must be devised more suited to the needs of the majority of the pupils. In 1920 a new secondary curriculum was drawn up with a wider choice of subjects which included commercial subjects and agricultural subjects. By 1923 there were many candidates taking woodwork, metalwork, needlework, agriculture, music, cookery and related subjects. Biology was introduced as a science subject.[1]

Special mention was made by du Toit of the prominent place given to agricultural education largely as the result of Dr. Viljoen's efforts to point out the absolute necessity of education fitting the needs of the country.[2] Even as late as 1948 when the de Villiers report was published, this point was still being stressed. According to this report, between 3 000 and 4 000 Whites were required to be recruited annually and at that time only 400 were completing their training yearly in agricultural faculties, colleges and high schools, many of whom did not take up farming. It was evident that the bulk of farming recruits were not technically trained for this occupation. It was pointed out, too, that the pursuit was becoming more difficult and complex.[3]

If this was still the position in 1948, Dr. Viljoen's concern is easily understood and his opinions must have carried some weight because in 1921 Sir Thomas Smartt, K.C.M.G., Minister of Agriculture, appointed a Committee under the Chairmanship of Dr. Viljoen to consider the whole question of Agricultural Education. Only a portion of the report has to do with this form of education at secondary level and with the vital question of training teachers for giving instruction in nature study and agriculture. It is of interest to note that, as a result of the Committee's work, a special inspector was appointed for

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1. P.S. du Toit. "Onderwys in Kaapland." J.L. van Schaik. Pretoria. 1951. Tweede, Hersiene en Vermeerderde Druk. p.127.
2. Ibid. p.128.
3. Report of the Commission on Technical and Vocational Education. Op cit. p.95.

agricultural education and £12 500 approved for agricultural education in the Cape Province. Certain secondary schools were to offer it as a main subject, and there was talk of creating agricultural vocational schools.[1]

5.2.4. Recommendations of the Viljoen Committee.

(1) Agriculture as such cannot be taught in the primary school but use should be made of the inexhaustible environment in the form of nature study and in observations of the peculiarities of plant and animal life. School gardens should be planted and a home project scheme introduced.

(2) A large percentage of farm boys and girls do not proceed to a course of secondary education. For these, courses in elementary agriculture should be provided in suitable rural centres, to which the admission qualification should be the fifth standard or fifteen years of age.

(3) At carefully selected centres agricultural vocational schools should be established with a two-year post-primary course.

(4) After the completion of these courses the best and most promising pupils should be drafted to the juvenile land settlements situated close to well-organised and supervised irrigation schemes for settlement on small holdings, with a view to ultimate independent ownership.

(5) The curricula of suitably situated secondary and high schools should be developed so as to include instruction in agriculture, and, at carefully selected centres, the emphasis should be gradually so redistributed as to make agriculture the major feature of the curriculum.

(6) At the schools of agriculture, courses of two years' duration should be conducted.

(7) At university institutions with Faculties of Agriculture, courses in agriculture of four or five years' length should be conducted for the B.Sc. and M.Sc. degrees in agriculture.

(8) The training institutions under the departments of education

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1. "Onderwys in Kaapland." Op cit. p.128.

should frame their primary teachers' lower courses to meet the requirements of the single teacher rural schools, and on completion of these courses, selected teachers might proceed to a school of agriculture either for a special course or a full diploma course in agriculture given to the holders of the B.Sc. or M.Sc. degrees in Agriculture. [1]

The schools of agriculture mentioned in (6) and (8) above were, of course, previously mentioned, and now called Agricultural Colleges, e.g. Grootfontein and Elsenberg.

5.2.5. *Second Report of the Education Administration Commission.*

The Education Administration Commission of 1923 in its second report had something to say about agricultural training. It forms a part of the committee's discussion of industrial and technical training. The committee, in general, thought industrial training should run parallel with theoretical training, this latter to be undertaken in evening classes. Most industrialists and educationists would disagree with this point of view today. But in respect of agricultural training the commission stated its opinion that this should usually be of the pre-employment type for three reasons:-

(a) Farms are not concentrated and an apprenticeship committee of farmers to organise and control employment would not be practicable.

(b) For the same reason of lack of concentration of farms, parallel school training could not be given except in concentrated courses when the farming activities permitted it.

(c) The farm is unlike the factory, in that, while the Industrial School cannot be a genuine factory, the Agricultural School can and should be a genuine farm. Farming is a more comprehensive activity than manufacturing and there is no insuperable difficulty in making one and the same institution, both a well-conducted farm and a well-conducted school. [2]

This was a very important statement in view of future developments.

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1. *Committee on Agricultural Education. Report. UG 26-'22.*
2. *Education Administration Commission. Second Report. Op cit. p.49.*

5.2.6. First moves towards Agricultural Schools.

It is not to be supposed that all the initiative in the field of agricultural education came either from the Department of Agriculture or from the Provincial Administrations. An extract from the minutes of a meeting of the Cradock School Board held on Monday 16th. June, 1911, illustrates this. "Mr. I.B. van Heerden, seconded by Mr. Michau, moved - pursuant to notice - that this Board approach the Government with a view to utilizing a portion of the farm Driefontein for the purpose of an Agricultural and Industrial School. The mover explained at length his reasons for the motion and after discussion, same was put and carried unanimously. Further resolved that a committee consisting of the Chairman, Messrs. Butler, Coetzee, du Plessis and the mover, go into the matter, discuss details of the proposal and communicate with the Government on the subject, Mr. van Heerden to be convener of the committee." [1] This decision led to the corner stone of the school building being laid on the 4th. of March, 1918, by Sir Frederick de Waal, Administrator of the Cape. It is, however, to be noted that it was a further thirteen years before the school was erected.

Why the Cape Provincial authorities did not proceed immediately with the building of the school is not clear. All that the magazine records is " Omdat die Administrasie skynbaar van plan verander het, het die stigting van die Landbou-Industriële skool sover as die lê van die hoeksteen gekom en daarby het dit geëindig." [2]

It can only be assumed that the reason for lack of progress in the extending of vocational schools was the lack of finance already discussed in Chapter 1, because the maintenance of interest in vocational education is demonstrated by the fact that Mr. George Hofmeyr, Secretary of the Union Education Department, together with Dr. W.J. Viljoen attended the Imperial Education Conference in London from 25th. June to

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1. Marlow Agricultural High School. Jubilee Magazine, 1955. p.14.
2. Ibid. p.14.

10th. July, 1923, as delegates from the South African Government. The topics discussed included courses of instruction in commercial, industrial, agricultural and domestic science education. The rural school was also discussed. [1]

Referring back to Chapter 1, we note that the year 1924 was that in which plans were made to transfer vocational education of secondary standard from the Provinces to the Union Department of Education.

5.3. The Period 1925 - 1938.

The Annual Report of the Union Education Department for 1925 stated that much attention had been given to the question of the provision of agricultural training in schools for boys of a type corresponding in age and attainments with those catered for in trade and industrial schools. It was the Department's intention to establish new schools at suitable centres. [2]

The 1926 Annual Report gives much more detail concerning the intentions of the Union Department of Education in regard to agricultural education. Apparently at Marlow the farm which was taken over had some 500 sheep and 100 cattle and was doing well - but there was not yet a school there. Negotiations were proceeding in connection with the farms Oakdale at Riversdale and Augsburg at Clanwilliam. In addition the Douglas, Kuruman and Barkly West areas had been inspected with a view to the possible establishment of agricultural schools in these areas.

The report goes on to say that the main problem of the Department in the sphere of agricultural training was the fact that a conservative estimate indicated that some four thousand farm boys were leaving school annually after completing standard VI. A few of these went on to trade schools but the majority went back to the farms. The obvious statement that these lads would be a far greater asset to the State had they undergone proper training in their vocation, follows.

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1. Annual Report of the Union Education Department for 1923. p.3.
2. Annual Report of the Union Education Department for 1925. op cit. p.5.

The next point of interest in the report was that the Department had provisionally divided the Union into some thirty different areas and planned, in the course of time, to create at least one agricultural school in each area. The schools were to be planned for 150 to 200 pupils each and were to offer in some cases a two-year course and in others a three-year course. This, the Department thought, would cater for about fifty per cent of the Union's requirement. The position would be improved further by a system of winter courses.

The course proposed comprised both the official languages, agricultural arithmetic and agricultural theory. In the first year citizenship would be a subject, in the second year business methods and in the third year bookkeeping. As far as agricultural subjects were concerned a choice was to be made from the following twelve subjects:- 1. sheep and wool, 2. dry land farming,3. irrigation,4. cattle and dairy farming,5. pig keeping,6. poultry farming,7.bee keeping, 8. fruit farming, 9. tobacco growing, 10. vegetable cultivation, 11. grain and fodder production, 12. horticulture. Some eight hours per week were to be devoted to the theory of agriculture, while,with regard to practical work, the lads would have to execute any task on the farm in order to acquire the necessary dexterity, in accordance with the principle that a farmer must be able to work himself if he wants to reap the greatest benefit from his management. [1]

Despite the fact that all these plans were carefully made, it was some years before the first agricultural vocational schools started operating in the Cape Province, and it will probably be more instructive to consider the history of the first three schools individually, now that the background to the story of the growth of agricultural secondary education has been sketched.

5.4. Augsburg Agricultural High School, Clanwilliam.

The name Augsburg is that of a town in Germany and the South African school was named after it because it was the site of a mission run by the Rhenish Mission Society until 1875. The property of between five

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1. Annual Report of the Union Department of Education for 1926. pp.32 & 33.

and six thousand morgen was purchased in that year by Paul Hendrik Stefanus van Zyl for his son Dirk, a respected man who was a member of the Colonial Parliament. Dirk J. van Zyl in his turn bequeathed the farm to his son Petrus.

In 1920 the Department of Lands bought the farm together with Taaiboskraal and Warmhoek from Petrus J. van Zyl for about R30 000 and divided it into seven portions, placing returned soldiers on them. This scheme soon proved a failure and the ground was transferred to the Union Department of Education for use as an agricultural-vocational school.

There was, of course, the mission school building on the farm Augsburg, and in addition, in 1895 Dirk van Zyl had a double storey house erected for use as a "Poor School" and hostel. Elementary education and a two-year teachers' training course were given here.

It was, however, in 1928 that the agricultural-vocational school started here. Indigent country boys from standard IV to standard VI were taken in for a three-year course. (Some of them remained for only six months.) There were no prescribed syllabuses and no recognised certificates or diplomas were issued. Afrikaans and English were taught but there was no recognised standard. Agriculture, including farm mechanics and civics were also taught. Because of the lack of prescribed syllabuses, the teachers drew up schemes of work which had to be approved by the circuit inspector. Although the purpose of the school was to train pupils as farm foremen, many turned to other vocations, such as the Police, the Railways Administration, or became apprentices. [1]

On the 1st. April, 1938, consequent on the passage of Act No. 30 of 1937 - The Transfer of Agricultural Schools Act - the school with all its equipment, buildings and staff was transferred to the Cape Education Department. [2]

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1. Letter from Principal, J.A. Mostert of Augsburg. 20th. February, 1970.
2. "Onderwys in Kaapland" Op cit. p.145.

Up till this time the enrolments [1] had been very disappointing:

YEAR	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
ENROLMENT	5	13	15	15	15	20	28	38	43	28

In the first year after transfer the Superintendent-General of Education reported a tremendous increase in enrolment. [2] (This is not reflected in the table on page 278.)

One should not be too hasty in reaching a conclusion as a result of this increase in enrolment. Dr. S.F.N. Gie, the Secretary of the Union Department of Education, in his annual report for the year 1928, had this to say about the projected schools at Augsburg and Oakdale. "The lack of suitable buildings was a great drawback. At Augsburg, the roof of the main building was lying on the ground till within a few months from the date of opening. It had lain there for two years. ..... At Augsburg - at one time one of the best developed farms in that area - nothing was left. At all the schools wire fences had to be reconstructed and new paddocks created. There were difficulties with water rights. Equipment was necessary. The lay-out had to be planned." [3] He went on to explain that each school had its own course of training, the syllabuses being designed to meet the requirements of the area, and much elasticity was permitted. The Department issued guides but left much to the originality and initiative of the staff. It must have taken a considerable time to bring cosmos out of this chaos.

Nevertheless, when the school was placed under Provincial control, standards in academic subjects were immediately raised to those of the existing high schools. From 1939 a standard VII course was introduced leading to the Junior Certificate course. The subjects were:-

Afrikaans (Higher)	- 400 marks
English (Lower)	- 300 marks
Agriculture A	- 300 marks
Agriculture B (Special)	- 300 marks
General Science or Physical Science	- 150 marks
Biology	- 150 marks
Bookkeeping and Commercial Arithmetic	- 150 marks each. (This

1. Statistics extracted from Annual Reports of Union Department of Education.
2. "Onderwys in Kaapland." Op cit. p.145.
3. Annual report of the Union Department of Education for 1928. (UG 51'29) p.53.

AGRICULTURAL HIGH SCHOOLS – CAPE PROVINCE

YEAR	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
AUGSBURG	15	28	35	55	67	58	52	47	33	56	60	60	43	34	56	65	64	53	56	54	62	62	72	72	72	85	96	109	104	99	99	95	123
BOLAND																									125	202	203	198	216	227	209	225	230
MARLOW	22	24	36	36	30	42	41	36	53	60	68	79	83	91	112	111	113	121	138	173	174	172	171	149	164	172	179	191	172	155	160	165	172
OAKDALE	20	35	50	62	67	70	89	85	69	68	80	100	103	102	97	96	102	108	119	145	182	172	193	198	201	202	199	196	206	205	203	200	200
VAALHARTS																				52	78	79	88	86	92	93	108	103	105	86	101	113	136

subject was deleted in 1942 and replaced by Agricultural Economics, and in 1955 the latter was in turn replaced by General Mathematics.)

The Senior Certificate course comprised the following subjects:-

Afrikaans (Higher)
English (Lower)
Agriculture A
Agriculture (Special) B
General Science
Bookkeeping and Commercial Arithmetic

The last-named subject was replaced in 1943 by Agricultural Economics and this, in its turn, in 1957 by Mathematics for those who wished it as the alternative subject to qualify for Matriculation exemption.

From 1957 a standard VI course was introduced.

At present syllabuses are again being revised and the new curricula will be discussed later in this chapter.

The only other point to note now in regard to Augsburg is that the school is in course of being entirely re-built, the original farmhouse of Dirk van Zyl, which served as a hostel for so long, and the old double-storey building both being demolished in 1969. [1]

5.5. Oakdale Agricultural High School, Riversdale.

Oakdale also opened as an Agricultural-Vocational School in 1928. The accommodation was better than at Augsburg but still inadequate. [2] The old farmhouse was used as a hostel for pupils and house-parents and another dwelling house, three quarters of a mile away, was used to accommodate surplus pupils eventually. The farm is about 1 100 morgen in extent.

In 1930 a hostel for 42 pupils and staff was erected, the old farmhouse being used solely to provide classrooms. The majority of the first pupils enrolled were indigent and could not otherwise have obtained any form of vocational training. After obtaining the training in either the two or the three-year course, they were at least able to secure employment as farm foremen with well-to-do farmers. It was the

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1. All information supplied by letter from Principal J.A. Mostert of Augsburg.
2. Annual Report of Union Department of Education, 1928. Op cit. p.53.

exception when a farmer sent his son to an agricultural school in those days. It appears, however, that the majority of these first pupils acquitted themselves well and some became farmers in their own right. [1]

The enrolments [2] in this school in the early days were also disappointing.

YEAR	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
ENROLMENT	7	16	22	30	36	36	35	30	29	30

In these early days of the schools' existence a very great deal of time was given to practical instruction. This may have been a contributing factor to the small enrolments.

As with the other agricultural vocational schools, Oakdale was transferred to the Cape Provincial Administration on 1st. April, 1938. Courses were changed as mentioned in the previous section of this chapter and pupils were transported to the Riversdale Boys' High School for their academic subjects and pupils from this high school were taken to Oakdale if they chose Agriculture as one of their optional subjects. This arrangement lasted from 1939 until 1945, when the numbers of pupils involved became too large for this system of transportation to continue, and each school had to work independently.

The courses provided were, of course, similar to those mentioned for Augsburg.

Additions to the school buildings were made in 1941 and 1944 and to the hostels in 1942 and 1947, and have been continued until the present time. Planning is again being undertaken to modernise the school buildings and workshop facilities. [3]

5.6. Marlow Agricultural High School, Cradock.

It was mentioned earlier that the foundation stone of this school was laid in 1918. A beginning with the school building and a hostel for 40 pupils was made in 1929 and the school opened on 21st. January, 1931, with 9 pupils, although a principal and two instructors were

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1. School Magazine, Agricultural High School, Oakdale, 1964. p.21.
2. Statistics taken from annual reports of the Union Education Department.
3. School Magazine, Oakdale. Op cit. pp. 21 & 22.

appointed at the beginning of 1930 to carry out the preliminary work. The only building available in 1930 was an old farmhouse, three miles from the school and the staff had to make do with this until the hostel was completed. [1]

It is to be noted that the school opened in the depression years when money was scarce. This restricted the growth of the school to some extent, but nevertheless there was a steady growth. [2]

YEAR	1931	1932	1933	1934	1935	1936	1937
ENROLMENT	9	25	35	33	33	37	32

The hostel was enlarged in 1934 to accommodate 60 pupils.

The taking over of the school by the Province in 1938 must have had the same effect at Marlow as at the other two schools because in 1945, a laboratory and science rooms were added to the classroom block and in 1946, the hostel was enlarged to accommodate 85 pupils. In point of fact, 115 hostel pupils were accommodated, presumably by using the old buildings and putting up with some discomfort, and by 1952 the laboratory had been taken into use as a dormitory so that a total of 122 pupils could reside at the school. The advisory committee acquainted the Cape Provincial authorities with the position and it was agreed to extend the hostel facilities but all the planning went awry when the existing hostel burnt down on 7th. November, 1952. The effect of this was that pupils were accommodated in extremely uncomfortable quarters and under difficult conditions in farm buildings for two and a half years. Eventually a new hostel for 120 resident pupils was provided. This, too, soon proved inadequate, necessitating the building of a hostel for sixty senior pupils. The growth in pupil enrolment, of course, necessitated extensions to classroom accommodation and in 1953, a study hall and two extra classrooms were added and further extensions have recently been made. As in other agricultural high schools, pupils themselves, from time to time, undertake building work as part of their training. Thus it was with the 1953 additions. Another feature of

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1. Jubilee Magazine, Marlow. Op cit. p.18.
2. Statistics from annual reports of the Union Education Department.

agricultural high schools is the provision on the campus of staff houses. In the case of Marlow, eight such houses were provided between 1930 and 1963.

When the school opened in 1930 the only available farm building was an old shed some three miles from the school site. It was used as a bull pen and horse stables. There were no cowsheds and milking was done in a primitive stone kraal. Two instructors and nineteen boys from the King William's Town Industrial school were transferred to Marlow for the year 1931 and erected cowsheds, horse stables and a silo. Additions to these outbuildings have been steadily made over the years, so that the school and the farm today are extremely well provided.

The farm is about 3 800 morgen. In the early days the fencing of this, the sub-division into camps and the provision of water in these paddocks, of itself, was no mean task and took several years to complete.

The courses offered were as described for Augsburg, and as at Oakdale, some attempt was made in the early days for academic work to be done at Cradock Boys' High School and Agriculture at Marlow. The attempt was not successful and Marlow acquired full high school status which must have contributed to the steady increase in enrolments.

An interesting experiment was made at one time at Marlow. It was the provision of a non-academic practical course for the below-average intelligence boys. The course was either a one, two or three-year one. It was mainly practical in nature but was supplemented by elementary courses in the two official languages, civics and general knowledge. The Department was not very satisfied with the results of this experiment and so the course was discarded.[1] *Nevertheless, there is a possibility that some such course will be re-instituted at the agricultural high schools because of the ever-increasing interest now being shown in the education of the less academically gifted pupils.*

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1. Marlow Agricultural High School. Jubilee Magazine. pp. 18-23.

5.7. The Period 1938-1958

5.7.1. Introduction

To some extent this period has been covered in discussing the establishment and development of Marlow, Oakdale and Augsburg Agricultural High Schools. This was necessary in order to give a reasonably complete account of these schools.

In reading through the education reports of the Superintendents-General of Education from 1938 onwards it is noticeable that very little of note in connection with the three agricultural high schools was written. From the sketches of the schools written in the previous sections it is, of course, obvious that this was a period of development, experiment and consolidation.

However, apart from the de Villiers Report which has already been referred to, in this period sections of the education reports were written on agricultural education on three occasions.

5.7.2. The 1946 Report

In his annual report for 1946, the Superintendent-General of Education, Dr. W. de Vos Malan, wrote a special report on "Agricultural Education", the reason being that he had been informed that the purpose of these schools and the facilities they offered were not sufficiently well-known to parents and pupils and that they were not receiving the support they deserved.

In this report he named the three agricultural high schools in the Cape Province, Marlow (Cradock), Oakdale (Riversdale) and Augsburg (Clanwilliam) and gave the total enrolment as 196 pupils and said that ultimately provision would be made for approximately 300 at the three schools.

He wrote that these schools were transferred to the Cape Education Department on 1st. April, 1938, in terms of Act No. 30 of 1937 and that these schools differed from the other high and secondary schools which provided a bias in the direction of agriculture, being definitely vocational. Pupils admitted to the agricultural high schools were assumed to have decided about their future occupation. The specific

aim of the schools was to train farmers or men to be gainfully employed in farming pursuits.

Dr. de Vos Malan continued by expressing his regret that hundreds of boys each year left school to take up farming without suitable preparation for this work. The agricultural high schools were designed to fulfil a two-fold purpose: first, to prepare pupils of normal intelligence to become self-supporting farmers, and second, to equip pupils with a lesser degree of intelligence to become efficient foremen on the farms.

Previously, he pointed out, such vocational training could only be obtained at the agricultural colleges but that entrance to these was restricted to pupils who had passed standard VIII.

He gave the contents of the course, then a four years' course for which the minimum entrance qualification was a pass in standard VI, as comprising the two official languages, science (chemistry, physics, biology, bacteriology, etc.), agricultural economy, and a major in agriculture. There were two certificates, the Junior and Senior Certificates.

His next point was that the schools were situated on farms which represented the farming activities of the areas in which they were located. All the boys lived in hostels attached to the schools, so that they could take a hand in doing farm chores, e.g. feeding stock and milking. In addition to this practical work they received more than eight hours' instruction per week in agriculture.

When the Administration took over these schools the cost per pupil, according to Dr. de Vos Malan, was £178.17.1d per annum. Yet, in spite of large expenditure on improvements and increases of staff, the cost had been reduced to £106.12.4d, and he anticipated that when each school had its full quota of 100 pupils, the annual cost would drop to about £70.

He wrote that the most serious problem facing the schools was the scarcity of agricultural teachers, due to resignations and the fact that so few students qualify for the profession. Two solutions had

been proposed to him: that the Department should, in its own training colleges, train teachers of agriculture, or that the Department of Agriculture be approached with a view to sharing the services of professional agricultural officers.

One further point emerged from the report to which further reference will be made. At Vaalhartz High School a vocational course for the training of future farmers was offered. In the context of the report this vocational course was not taken by all pupils at the school, that is, the school was an ordinary high school but had a division which was primarily agricultural in curriculum. [1]

5.7.3. The 1956 Report

Dr. J.G. Meiring, Superintendent-General of Education, in the 1956 Education Report, devoted a section to Agricultural Education. Its purpose was, just as that of the report quoted above, to make clear the purpose of agricultural education. He wrote that 45 high schools and 11 secondary schools in the Cape Province offered the ordinary agricultural course which was one not organised on professional lines but with the purpose of cultivating in the pupils a love for nature, the soil and the rural way of living, so that they might not become estranged from the land even if they did not settle in the country. The object was not the training of farmers.

Dr. Meiring then mentioned the three agricultural high schools, Marlow, Oakdale and Augsburg, and went on to say that authority had been granted for the establishment of a fourth agricultural high school at Vaalhartz from 1st. January, 1957 and that it was hoped that a fifth school would be established in the Western Province. He said that Marlow had accommodation for 180 pupils and Oakdale for 153. He did not give the enrolment at Augsburg but said that the schools were full to overflowing.

He wrote that there were two high schools which also offered specialised agricultural courses.[2] (It can be deduced from statistics that these were Outeniqua, George and Kakamas.)

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1. Report of the S.G.E. for 1946. pp.78 and 79.
2. Report of the S.G.E. for 1956. pp 34 and 35.

5.7.4. The 1958 Education Report

Dr. Meiring, in this report, gave a few extra details. The first was that 90% of the pupils who followed courses at agricultural high schools took up farming as a career. The second was that the course at these schools costs the State approximately three times as much as that at ordinary high schools, and the third point was that it had been decided to introduce the standard VI course at agricultural high schools from 1958. [1]

It is now necessary to return to the remaining two agricultural high schools to describe their establishment and development.

5.8. The Northern Cape Agricultural High School.

The existence of an agricultural section of the Vaalharts High School apparently indicated to the School Board for the district by the year 1951, the need for an agricultural high school in that district, because on 9th. March, 1951, the School Board recommended to the Cape Education Department that the Department of Lands be approached to transfer land for use as a stock farm when an agricultural high school had been established. The farm "Dawlish" of 3 200 morgen was recommended. It had three boreholes with wind pumps and reservoirs. Natural grazing was available and the farm, ten miles from the school, was in good condition.

The idea of establishing an agricultural high school in the Northern Cape must have found favour, because Dr. de Vos Malan, the Superintendent-General of Education, paid a personal visit to the area on the 13th. October, 1951.

The Department of Lands on 1st. April, 1953, agreed to hire 1 000 morgen of ground at £60 per year for a five-year period beginning from the 1st. January, 1954. Thereafter consideration would be given to the question of transfer. The ground was to be used for grazing sheep and cattle.

Planning went ahead and eventually the school was founded as the Vaalharts Agricultural High School in January, 1957, with six teachers

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1. Report of the S.G.E. for 1958. pp. 10 and 11.

and 52 pupils of whom 41 were boarders. It was not long before the school asked for 3 000 morgen for its sheep and cattle farming. It was not granted, but in 1959, 1 500 morgen were transferred by the Department of Lands. In 1960 the school requested an additional 1 500 morgen of grazing ground. On 11th. January, 1962, 1499.6626 morgen were donated by the Government but the 1 000 morgen of hired ground had to be given up.

In 1963 the name of the school was changed to the Northern Cape Agricultural High School.

On the 23rd July, 1965, 29.9082 morgen of irrigated ground was purchased for the school for the sum of R40 000.

On the 26th July, 1969, extensions to the buildings and a school hall, costing a total of R164 213, were opened by Mr. J.C. Heunis, the member of the Provincial Executive Committee responsible for Education. [1]

5.9. Boland Agricultural High School, Windmeul.

In 1954 representatives of farmers' associations from Durbanville, Philadelphia, Malmesbury, Middel-Swartland, Herman, Mooreesburg and Hopefield met in Malmesbury to consider what action should be taken to have an agricultural high school provided in the Boland. It was decided to request the executive committee of the Farmers' Union to do everything in its power to persuade the Provincial Education Department to move in this matter. A deputation waited upon the Superintendent-General of Education who not only indicated his sympathy with the project but requested the Union to prepare a list of names of farms suitable for the purpose.

In 1955 the education sub-committee of the executive committee of the Farmers' Union had further discussions with the Superintendent-General who promised to bring the matter to the notice of the Provincial Executive Committee. The result was that in 1956 the establishment of the school was agreed to in principle and the Union requested to recommend a suitable farm for the purpose.

A committee of the Union investigated this thoroughly and eventually recommended the farm "Langerug" in the Paarl area and took an option

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1. Details extracted from the site and building files of the school.

on it. A further investigation was undertaken in 1957 and members of the Provincial Executive Committee visited several farms. The result was that in 1957 "Langerug" was purchased by the Provincial Administration. The farm was, however, hired out for three years to allow for the necessary planning and building operations. The planning was undertaken by a committee of the Union consisting of Messrs. A.J. du Toit, J.E. de V. Loubser and W.D. de Waal, together with the Inspector of Agricultural Education, Dr. J.G. Hofmeyr. The planning was completed in 1958 and in 1959 architects were appointed to prepare the sketch plans and working drawings. Building operations began in 1960.

At one of the many interviews between the Superintendent-General and the committee, the Union's proposal of the name Boland Agricultural High School was agreed upon. The planning committee, with the addition of Mr. P.R. de Villiers, was asked to serve as a provisional advisory committee for the new school.

The first principal, Mr. C. du T. van der Merwe, and the first school secretary were appointed in 1961 and the school opened at the beginning of 1962, having been built to accommodate 120 pupils. Within two years the accommodation was increased to cater for 200 pupils. Further additions have been made in recent years, so that the school now has 233 pupils. At the present time planning is taking place to increase the accommodation to provide for an additional 150 pupils. [1]

5.10. 1958 to the Present Time.

5.10.1. Fort Beaufort Agricultural High School.

This school is only in the planning and building stages. It is ultimately to accommodate 300 pupils but will initially be built for 110 pupils. The farm is of 1 773 morgen and was purchased from the Fort Beaufort Municipality for R60 per morgen. The scheme was approved by the Provincial Executive Committee on 29th. November, 1966 and it is hoped that the buildings will be completed by the end of February, 1972.

The courses to be offered will be discussed later in this chapter.

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1. All information supplied in a letter from Principal A. Teubes of Boland Agricultural High School.

5.10.2. Courses at Agricultural High Schools.

When describing the school Augsburg at Clanwilliam, certain of the earlier courses given at agricultural high schools were described. It must first be said that all of these schools offer fundamentally the same courses but, according to the district in which any particular school is situated, certain aspects of the farming part of the curriculum are emphasised. Examples are given:-

Augsburg: Orange, wine grape and raisin grape growing and karakul sheep farming.
Marlow: Merino sheep farming, dorper sheep (mutton sheep) farming.
Northern Cape: Cotton growing, wheat production, beef cattle and dorper sheep farming.
Boland: Wheat production, merino sheep farming, grape and fruit growing.
Oakdale: Wheat production, merino sheep (wool) farming.
Fort Beaufort: Orange growing, merino sheep, beef cattle and angora goat farming.

All the schools produce fodder and hay for feeding the farm animals, all have small dairy herds (three schools with Jersey and Friesland cows and two schools with Jersey cows only), all keep poultry and pigs, and grow vegetables. The idea is to provide the school hostels with as much local produce as possible whilst providing the means of practical instruction in these very important aspects of everyday farm work. [1]

Before giving the details of the curriculum it may be as well to state the general aims of agricultural instruction as they have been given in the preamble to the new courses: [2]

"1. The main purpose of agricultural instruction in the high school is, in common with all instruction, the education of the child by bringing it through the medium of agricultural subjects, into close contact with nature with its wholesome and formative effect on mankind.

2. With the aid of scientific agricultural knowledge as well as practical experience, a love for and an appreciation of the soil, plants and animals and hence for farm life, must be fostered in the child. The child must be helped to realise the importance of the soil

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1. Letter from Mr. J.M. Grobler, Senior Subject Inspector (Agriculture), dated 15th. April, 1970.
2. Minutes of the Departmental Examinations Committee, Cape Education Department, 19th and 20th. March, 1970. pp. 224 and 225.

as the basis for the survival of its nation; that farming should not be motivated by mere profit-seeking, but that conservation farming is the responsibility of every farmer towards his nation and towards posterity in deep dependence upon God.

3. The judicious utilisation of the agricultural resources as a basis for conservation farming must therefore be inculcated in the child. The idea of conservation must ever remain the starting-point in the teaching of all aspects of the agricultural subjects; it must develop an attitude to life in the pupil.

4. Through the practical approach to the subjects the following characteristics must be developed in the child:

4.1. Personal skill.
4.2. A sense of responsibility.
4.3. Alertness. (the power of observation)
4.4. A concept of the problems of farm life, but also of the privileges and importance thereof.
4.5. Industry; the correct attitude towards manual labour.
4.6. An insight into the planning and management of organised farming.

5. The aim is not purely vocational training, although the pursuit of these subjects forms the basis for pupils who desire, after leaving school, to :

5.1. Farm or if need be, follow some profession.
5.2. Attend a course at an agricultural college; be trained as agricultural technicians.
5.3. Be trained as agricultural scientists at a university.

The courses offered in the various standards are detailed next. There are certain non-examination subjects just as in all other schools. These are religious instruction, music and physical education, and they form part of each year's work.

Standard Vl examination subjects are :- the two official languages - one on the higher and one on either the higher or lower grade, general science, mathematics, history and geography, general agricultural science and practical agricultural science (which includes some farm mechanics).

The standard Vll and Vlll examination subjects are :- the two official languages, one on the higher and the other on either the higher or lower grade, general science, mathematics (or accountancy and

commercial mathematics), general agricultural science, and practical agricultural science (including farm mechanics).

In standards IX and X the examination subjects are:- the two official languages, one on the higher and the other on the higher or lower grade, physical science or biology, agricultural economics or mathematics, agriculture - theory and practice and in this field two subjects have to be chosen from animal husbandry, field husbandry and farm mechanics.

The conditions for a pass in standards VI and VII have been dealt with in Chapter II.

To pass in the standard VIII (Junior Certificate Examination) a candidate will be required to pass in -

(a) the official language taken on the higher grade (at least 160 marks out of the maximum of 400 marks).

(b) the other official language on either the higher or the lower grade (if taken on the lower grade 100 marks at least out of the maximum of 300; if taken on the higher grade 100 marks out of the 400 marks is regarded as a pass on the lower grade).

(c) three other subjects. (the pass mark is 100 marks out of 300)

In addition, the candidate is required to obtain at least 40% of the aggregate of marks in six subjects i.e. at least 760 marks out of the total of 1 900 marks.

Candidates attempt six subjects. The papers are set internally in each school and moderated by the Inspector of Schools in cases where he decides that it is desirable.

In order to pass the examinations in standards IX and X a candidate must enter for six subjects. For the agricultural high schools these have been listed above. As for the Junior Certificate, a candidate is required to pass in the aggregate (760 marks out of 1 900) and in five subjects, the rules for a pass in individual subjects being the same as for this certificate.

To obtain Matriculation exemption, a candidate from an agricultural high school must pass the Senior Certificate Examination in the two official languages, mathematics, physical science or biology, and one

or two of the other subjects and obtain an aggregate mark of 860 out of 1 900. In the four subjects mentioned the candidate must obtain 40% of the marks per subject. The pass mark for the fifth and sixth subjects are as for the Senior Certificate i.e. 33⅓%.

5.11. Vocational and Vocationally-Directed Education.

In a previous paragraph when stating the aims of the agricultural high school course it was said that "the aim is not purely vocational training".

Throughout this thesis the terms "vocational" and "vocationally-directed" have been used perhaps somewhat indiscriminately. This is because, at secondary level, it is extremely difficult to differentiate between them in many cases. In Chapter 1 the definition given in Act No. 41 of 1967 - The Educational Services Act - was given. For convenience it is repeated:-

"(XXX11) 'vocational education' means a course of full-time education usually provided up to a standard not higher than the tenth standard and -

(a) in which more than two subjects are commercial subjects referred to in Schedule 2; or

(b) which includes instruction and training, whether theoretical or practical or both theoretical and practical, in any trade referred to in the said Schedule 2

but does not include

(i) special education; or

(ii) a course of instruction and training in woodwork or metalwork or any other practical art or craft not being specific instruction or training for a trade referred to in the said Schedule 2, and the duration of which does not exceed eight hours per week, irrespective of the number of such subjects taken in such course ..... ."

This is a definition of convenience rather than an attempt to define what is vocational and what is not. The object of this definition was to protect certain schools - the technical high schools and the commercial high schools - from any interference with their curricula

and to prevent other schools becoming more 'vocational' in nature.

The de Villiers Commission Report of 1948 defined vocational education thus:

"Vocational Education means instruction and training in commerce, agriculture, housecraft or any trade or industry." [1]

Finally, the Biebuyck Committee defined vocationally-directed education as,

"Education designed to be both formative in terms of personal development and functional in terms of the vocational needs of the individual and the economic needs of the community." [2]

In all the schools described in this thesis the education given is definitely designed to be formative. This will be discussed more fully in Chapter VIII. Any subject and any form of instruction can and should be aimed at personal development. The difference, if difference exists, between vocational and vocationally-directed education can only be one of emphasis. A girl leaving a commercial high school after passing the Senior Certificate Examination in shorthand, snelskrif, typewriting and accountancy is equipped to take up a position as a shorthand-typist-bookkeeper with no further training. These subjects could be called vocational subjects for her; but a boy leaving the same type of school could not be called an accountant without much further training, so that even the subject 'Accountancy' is not for him vocational but vocationally-directed. So, too, with boys from technical high schools. When they have finished their training at standard X, they are not tradesmen. Really then the training is vocationally-directed.

It will have been noted, too, that in all the courses described in Chapters II to V, that about half the subjects taken are non-vocational subjects e.g. the official languages, mathematics, physical science and history.

It can be understood then that the agricultural training received at an agricultural high school is more likely to be vocationally-directed

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1. de Villiers Report. Op cit. p.1.
2. Biebuyck Report. Op cit. p.1.

than vocational, and one is forced to the general conclusion that the term 'vocational education' might well be dropped when applied to full-time secondary education.

5.12. Teachers of Agricultural Subjects.

There are three types of teachers employed in agricultural high schools. The first type is concerned with the teaching of the usual academic subjects and the qualifications required for this are the same as for teachers of the same type in other high schools, that is to say, an appropriate degree and a university education diploma. In some cases a teacher with a four-year college of education diploma is employed.

The second type is one concerned with the teaching of the subject farm mechanics. The desirable qualification here is the National Teachers' Diploma (Workshop) which, as has been explained in Chapter 11, implies an apprenticeship and practical experience in the trade direction offered and the appropriate technical and professional qualifications. In the case of agricultural high schools there should really be a teacher qualified in building subjects and one qualified in motor mechanics who has had experience in the maintenance and overhaul of farm machinery. At present there are very few such teachers in the agricultural high schools but special efforts are being made to obtain some and offer the same training facilities as those offered for workshop teachers in technical high schools.

The third type is the one concerned with the teaching of the agricultural subjects. In the Cape Province there are two ways of qualifying for these posts:-

(A) by obtaining the education diploma in agricultural science at the Oudtshoorn Training College. This is a four-year course, the first three years being spent acquiring the primary teachers' diploma for senior standards with specialisation in Agriculture and then taking the fourth year course in Agricultural Science.

The entrance qualification to this course is the possession of the Cape Senior Certificate or a recognised equivalent thereof. The three-year course for the Primary Teachers' Diploma: Senior Standards,

is divided into three groups, in each of the three years. Religious instruction is not included in the groups but, all student-teachers are required to be trained in the method of teaching this subject. [1]

Group	*1*	*11*	*111*
A Academic	*Official Language - Higher* *Official Language - Lower* *Mathematics* *Science* *History* *Geography*	*Official Language - Higher* *Official Language - Lower* *Mathematics* *Science* *History* *Geography*	*Official Language - Higher* *Official Language - Lower* *and ONE of the following:* *Mathematics* *Science* *History* *Geography*
B Professional	*Principles of Education including Audio-visual education (Introduction)* *Class Teaching (Introduction)* *Speech Training* *Writing and Blackboard Technique*	*Principles of Education including Audio-visual education* *Class Teaching* *Speech Training* *Writing and Blackboard Technique*	*Principles of Education* *Class Teaching*
C Special Subjects	*Two of the following:* *School Music* *Art* *Handwork* *Physical Education* *Agriculture*	*Two of the following:* *School Music* *Art* *Handwork* *Physical Education* *Agriculture*	*One of the following:* *School Music* *Art* *Handwork* *Physical Education* *Speech and Drama* *Mathematics* *Science* *History* *Geography* *Agriculture*

In the case of agriculture in the first and second years, 3 periods per week are devoted to this subject and in the third year, 6 periods per week. No subject method in this subject is given in the first year but in the second and third years elementary subject method is given as a preparation for the more intensive study of it in the fourth year course.

1. *Chapter 18. Education Ordinance 1956 (as amended in 1970).*

The fourth year course is divided into four groups:-

Group A. Class Teaching

Group B. Agricultural Science comprising soil science, animal husbandry, fruit farming, viticulture, crop production, agricultural economics.

Group C. Natural Sciences - biology and physical science.

Group D. Subject method.

(B) by obtaining the B.Sc. degree in Agriculture from the University of Stellenbosch and the secondary teachers' diploma or, alternatively, taking a four-year B.Sc. (Agriculture) course for teachers of agriculture. This second method has been introduced to orientate the students towards the teaching side of agriculture right from the beginning of the course. The curriculum is as follows:-

First Year: Chemistry 1, Physics 1, Botany 1, Zoology 1.

Second Year: Soil Science 1, Animal Husbandry 1 or Viticulture and Oenology 1, Genetics 1, Pomology 1, Plant Pathology-Microbiology, Special Agricultural Entomology, Animal Physiology 1, Agricultural Biochemistry 1.

Third Year: Soil Science 11, Animal Husbandry 11 or Viticulture-Oenology 11, Plant Physiology, Crop Production, Special Poultry Breeding, Agricultural Biochemistry 11, Economics and Marketing.

Fourth Year: Educational Philosophy, Didactics, Practical Teaching, Educational Administration and the History of Education in South Africa and Comparative Education, Educational Psychology, Afrikaans, English, Subject Method of two high school subjects, one or two of Religious Instruction, Appreciation of Art, School Music, Youth Leadership, Librarianship, Craftwork, Speech and Drama, Physical Education (Sports Coaching).

CHAPTER VI

The Special Secondary School

6.1. Introduction

In the Education Report for 1952 and 1953, Dr. N.J. du Preez, the Departmental Psychologist, in his section of the report headed 'The Mentally Retarded Child' wrote, "At present there are 4 108 certified mentally retarded children in 336 special classes in 171 schools. A study of the tables of retardation in the Education Statistics of 1950 shows, however, that there are still almost 12 000 retarded and backward children for whom no proper provision is made. It is at present impossible to provide for the needs of all of these children because of the acute shortage of trained teachers and suitable accommodation.

With the introduction of the new junior secondary course and the implementation of the Special Schools Act (Act No. 9 of 1948), as

amended, which allows a backward child to be kept in school to the age of 19 years, (if it is possible and desirable), the inclusion of backward children in some post-primary course has become an immediate problem. Since, as a general rule, the normal child now leaves the primary school at the age of ± 13 years, it is not advisable to keep the backward child in a primary school for his whole school career. On the other hand, to promote him to a high or secondary school, without making proper provision for him there - and this can generally not be done in the smaller places - is equally detrimental."

Dr. du Preez went on to state that at various centres - Ugie, East London, Port Elizabeth, Oudtshoorn, George, Worcester, Cape Town, Stellenbosch and Vaalhartz - post-primary courses for these pupils were started but that most had to be abandoned because of lack of facilities. One, however, had developed into a special vocational school, namely at Westcliff in Cape Town. Apparently at the beginning of 1953, a grant of £7 000 from the Provincial Executive Committee, made it possible to establish this school. At the end of this year 97 older children were taking two or three-year courses in either sheet metal work, woodwork, painting or domestic science. This school proved a great success and met a very great need.

Many requests from country children for admission had to be refused because it was still a primary school with a special vocational department attached to it, the accommodation was limited and there were no hostel facilities. "It has become clear," wrote Dr. du Preez, "that training, which must of necessity prepare the backward child to take his place in the world after the completion of his school career, cannot be provided in the present type of special class attached to an ordinary school with its specifically academic staff. Such an approach to what is essentially a practical problem, is far too theoretical. Yet these first experiments served to throw into relief the very real need of the backward child for further training and adjustment and emphasised the need to establish central vocational schools, as opposed to special

classes attached to primary or high schools." [1]

This chapter is concerned with the post-primary course mentioned in Dr. du Preez's report but it will be necessary first to explain some terms and give the essential contents of the legislation which governs the education of these mentally-retarded children.

6.2. Special Classes

Dr. N.J. Heyns, the present Head of the Psychological and Guidance Services of the Cape Education Department, writes in his thesis 'Die Heterogeniteit van die Spesiale Klas' that a Miss Lewis established a special class in the Girls' Primary School at Woodstock in 1917 and that in 1925 Miss Rosa van Gelderen began with 'Modern Classes' at the Girls' Central School. [2] These apparently were tentative experiments to deal with sub-normal pupils because Dr. Heyns goes on to write that the first class which was in all respects a 'Special Class' was started in 1930 in the Hoër Jongenskool, now the Paul Roos Gymnasium, at Stellenbosch by Mr. D. Nel, inspired and guided by Professor J.J. Strasheim, Professor of Educational Psychology of the University of Stellenbosch. [3] It was in this year also that a course for the training of teachers for special classes was started at Stellenbosch due to Dr. Strasheim's efforts. The class at the Hoër Jongenskool was used by the student-teachers as a practice-class.

In 1937, Dr. Strasheim was seconded to the Cape Education Department and in 1938 became Departmental Psychologist and it was due to him that the interest in special classes, which had apparently awakened in 1929 in the Cape, was kept alive and grew. Dr. W. de Vos Malan was the Superintendent-General at that time and gave great support and encouragement to Dr. Strasheim. [4]

So much for the beginnings of special classes. But the purpose of this chapter is not to write the history of such classes; that has been done. We need, however, to know what a special class is when used in this context.

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1. Education Report 1952 & 1953. Cape Education Department. pp. 81 & 82.
2. Dr. N.J. Heyns. "Die Heterogeniteit van die Spesiale Klas." M.Ed. Thesis. University of Stellenbosch. pp. 14 & 15.
3. Ibid. pp. 14 and 15.
4. Dr. N.J. Heyns. "Die Spesiale Klasse van die Kaapse Onderwys Departement." D.Ed. Thesis. University of Stellenbosch. pp. 2 & 3.

In Chapter 1, page 4, as a footnote, the term 'deviate children' was defined and it was pointed out that mentally-retarded children were the responsibility of the Provinces. This is in terms of Schedule 1 of the Education Services Act, No. 41 of 1967, which repealed the Special Education Acts No. 9 of 1948, No. 15 of 1951, No. 45 of 1960 and No. 19 of 1961.

Ordinance No. 25 of 1968 (amended in 1969) of the Cape Provincial Council defines a 'handicapped child' as one who, in the opinion of the Department, is capable of deriving appreciable benefit from a suitable course of instruction, but who deviates to such an extent from the majority of children in body, mind or behaviour that he requires education of a specialised nature -

(a) because he cannot derive sufficient benefit from the instruction normally provided in the ordinary course of education;

(b) in order to facilitate his adjustment to the community, and

(c) because his attendance at an ordinary class in an ordinary school may be harmful to himself or to the other pupils in that class. [1]

'Special education' means such education of a specialised nature as is necessary to meet the particular needs of the handicapped child. [2]

'Special school' means a school in which special education is provided, and includes a class which is attached to an ordinary school and in which special education is provided. [3]

There are, of course, rules and regulations which govern the certifying of a child as a handicapped child. These are not the concern of this chapter but there is a paragraph in the Ordinance which does have a direct bearing on what has to be described.

"(1) A child who is required to receive special education ..... shall attend the special school designated by the Department or to which he may have been transferred until such time as all the requirements of compulsory school attendance have been complied with or he is exempted under section 7 from further attendance.

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1. *Ordinance No. 25 of 1968 (amended 1969). p.2.*
2. *Ibid. p.2.*
3. *Ibid. p.2.*

(2) A child who has completed the period of compulsory school attendance in terms of the provisions of subsection (1) may be compelled by the Department to attend a special school for a further period, if the Department is satisfied that such further attendance is necessary in order to prepare him better for his adjustment to the community; provided that a person shall not without the approval of the Director remain at a special school beyond the end of the year in which he attains the age of twenty years." [1]

Section 7 merely states that the Department may exempt a child from further attendance at a special school when of opinion that it is no longer necessary or desirable; or it may transfer him to an ordinary school. [2]

The Department is obviously very unlikely to treat a child as mentally-retarded if it is possible to avoid this. If it is suspected that a child is handicapped in this way, it is examined by a competent officer i.e. a member of the staff of the Psychological Services designated by the Director for this purpose. Such officers have at their disposal the tests that have been devised and are being devised as the results of psychological research over many years. If this officer certifies that the child should receive special education, the Department notifies the parent accordingly. The parent may appeal to the Administrator within a stated period against this decision. If the appeal fails the parent is required to send the child to the school designated by the Department.

The Department also establishes clinics for the mental examination and treatment of children suffering from scholastic, mental or behavioural disabilities.

The prime purpose of special education is the total rehabilitation of the mentally-retarded child. This possibly needs some explanation. A pupil is transferred to a special class bearing the stigma of being stupid. In all the years, however many they may be, that he has been

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1. *Ibid. p.4.*
2. *Ibid. p.4.*

in an ordinary class, he has accumulated the frustrations of being unable to cope with the work. He has seldom received the encouragement of success and rarely been praised for his efforts. If he had remained in a normal class he would almost certainly not have passed in a high enough standard to have entered skilled or semi-skilled work. The basic communication subjects would have been at a very low level and the general formative subjects would not have had sufficient influence on him to lead to good citizenship with all its implications (see Chapter VIII).

"In the Special Class the re-habilitation process follows the following steps and uses the methods indicated:-

(i) Individual and remedial teaching in the basic subjects in order to reach a standard which will serve his everyday needs in the use of language and reckoning.

(ii) The discovery of each pupil's best abilities so that success-situations may be created to replace the frustrations of the past. These success-situations lead to sound personality development.

(iii) The presentation of the general formative subjects is practical and directed towards the development of good citizenship and good breeding.

(iv) A pupil who does not proceed at the age of 16 years to a Special Secondary School, attempts the alternative standard VI examination. If he passes he is in possession of a certificate which allows him to enter one or other of a variety of semi-skilled occupations or upon one of a limited number of apprenticeships. Hence this certificate has an important economic rehabilitation value for this pupil.

For the carrying out of such a rehabilitation programme the following factors are important:-

(i) <u>Low class quotas which make individual work possible</u>.

A special class is established at a school when there are 12 pupils who need to be transferred to it and this class is not discontinued until the number of pupils in it drops below 9. On this basis even small primary schools are entitled to a class. A second special class is established when there are more than 18 mentally-retarded children, a third when there are 30 and thereafter a class for every additional 15 such pupils.

(ii) Classrooms specially equipped for group work and self-activity.

(iii) Generous provision of material for practical and creative work.

(iv) Freedom from the restrictions of syllabuses so that work with individuals may be done.

(v) Specially trained teachers able to implement the rehabilitation programme.

(vi) Access to specialised educational-psychological help." [1]

There is a team of specialists working under the Head and Assistant-Head of the Psychological and Guidance Services of the Cape Education Department and distributed over the Province so as to be able to give help when required.

6.3. Special Secondary Education

6.3.1. General

Mr. D.J. Liebenberg, the Superintendent-General of Education, in his speech at the opening of the new Westcliff Special Secondary School on 24th. March, 1961, said, "The establishment of the first Special Secondary School in Cape Town on 1st. July, 1956, with a staff of 13 teachers and 145 pupils marked the beginning of a new experiment in education in the Cape Province and was the almost inevitable outcome of the special class system which had officially begun with the first class in 1930 at the Hoër Jongenskool, now the Paul Roos Gymnasium, at Stellenbosch." [2]

Mr. Liebenberg went on to tell his audience that ideas about education changed from about the end of the nineteenth century and that 'Education for All' became the cry, despite the fact that the content did not change very considerably and was still decidedly academically biased. At the beginning of the twentieth century the cry became 'Education Suited to All' and the emphasis changed from the content of the curriculum to the presentation to the pupil. This, he said, was

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1. Rehabilitation in South Africa. June 1964. Vol. 8. No.2. Extract from article "Rehabilitasie vanmoedlike aanpasbare leerlinge in skole van die Kaapse Onderwysdepartement." pp. 107 and 108. (Translation)
2. Translated from Mr. Liebenberg's speech.

due to the effect of the developing science of psychology which stressed the great and important differences between individual pupils, especially in regard to their mental abilities, emotions, thought patterns and personalities, all of which have a considerable influence on their education and training. These findings presented a challenge to educationists to see that none of the components of personality development were overlooked in the educative process.

Mr. Liebenberg said that in 1913, in the Cape Province, children were compelled to attend school until they had passed standard IV but that by 1951 the compulsory level was 16 years of age (or the passing of standard VIII). This change, also, underlined the necessity for taking first into consideration the interest of the pupil who was compelled to attend school. The necessity for differentiated education was becoming more and more apparent.

The Superintendent-General's next remarks were directed to the question of the less academically-gifted pupils whose abilities and interests were more practically orientated. He sketched the history of the special classes and emphasised that it was essential to discover the abilities and interests of such pupils, so that these could be used and developed. Then drawing his last few observations together, he said that these considerations led to the conclusion that some form of post-primary course was necessary for at least some of these less gifted pupils. He said that the finding of an inter-departmental committee appointed in 1942 was that at the age of 14+ years these pupils should start receiving practical, pre-vocational training and he pointed out that the de Villiers Commission supported this contention. The stumbling block was that vocational training was the function of the Department of Education, Arts and Science. [1] This was surmounted, however, by the passing of the Act No. 9 of 1948, the Special Classes and Schools Act, which allowed the Provinces to provide special secondary schools for this purpose.

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1. Name changed from Union Education Department to Department of Education, Arts and Science in 1948.

Four years after the passing of this Act the Cape Province began, as Mr. Liebenberg phrased it "in an almost half-hearted way" to experiment by providing post-primary facilities at thirteen selected primary schools. Some of these were mentioned in paragraph 1 of this chapter. The failure of this experiment, however, led to the realisation that special secondary schools would have to be provided.

In the article in Rehabilitation previously quoted, a little more about this type of secondary education is to be found. The necessity to provide mentally-retarded adolescents with post-primary education to suit their particular needs has to be accepted with the realisation, too, that industrial life is becoming more and more involved and demanding specialised pre-vocational training if success is to be achieved. Hence, the article says, the necessity for the special secondary school.

It is not to say that all pupils in special classes are taken into special secondary schools. Many would not be able to benefit by the training offered. They, unfortunately, have to take the alternative standard VI examination and leave school to seek such work as they can find.

6.3.2. Selection of Pupils for Special Secondary Schools

Pupils have to apply for admission to these schools. They have to be 14+ years of age but, other things being equal, preference is given to pupils older than this. It must be remembered that in the special classes, whence the majority of these pupils come, the pupils have been under constant observation and their potentialities to benefit from some practical course will have been determined. In addition to their performance over the last year or two in a special class, they are expected to have an intelligence quotient of about 70. The final selection is done by the officials of the Psychological and Guidance Services Department of the Cape Education Department and not by the schools themselves.

There are only seven schools of this type in the Cape Province. These are shown in the tables on pages 306 and 307. It will be seen that provision was made in 1969 for only 1 222 boys and 576 girls. There were

CAPE
SPECIAL SECONDARY SCHOOLS
1969

DISTRICT	NAME OF SCHOOL	No ON ROLL		BOARDERS		TEACHERS		VOCATIONAL SUBJECTS	No. OF PUPILS
		BOYS	GIRLS	BOYS	GIRLS	MALE	FEMALE		
CAPE	BATAVIA CLAREMONT	237	108	–	–	14	12	HAIR DRESSING HOUSECRAFTS PANEL BEATING SHEETMETALWORK SIGNWRITING SPRAY PAINTING WELDING WINDOW DRESSING WOODWORK	34 54 40 72 9 43 7 20 66
EAST LONDON	BAYSVILLE	169	84	60	42	13	8	HAIR DRESSING HOUSECRAFTS PANEL BEATING SHEETMETALWORK SIGNWRITING SPRAY PAINTING WELDING WINDOW DRESSING WOODWORK	31 38 30 30 10 26 25 15 48
GEORGE	VAN KERVEL	115	91	100	70	13	3	HAIR DRESSING HOUSECRAFTS PANEL BEATING SHEETMETALWORK WOODWORK	33 58 69 29 17
KIMBERLEY	MONUMENT	116	37	56	–	8	4	HOUSECRAFTS PANEL BEATING SHEETMETALWORK SPRAY PAINTING WOODWORK	37 29 31 26 30
PAROW	WESTCLIFF BELLVILLE	232	99	89	–	18	6	HAIR DRESSING HOUSECRAFTS PANEL BEATING SHEETMETALWORK WELDING WOODWORK	58 41 43 77 17 45
PORT ELIZABETH	WEST VIEW	181	102	–	–	14	7	HAIR DRESSING HOUSECRAFTS PAINTING PANEL BEATING SHEETMETALWORK SIGNWRITING WELDING WINDOW DRESSING WOODWORK	51 58 3 66 34 19 12 13 47
UITENHAGE	UITENHAGE.	172	55	70	20	11	7	HOUSECRAFTS PANEL BEATING SHEETMETALWORK WELDING WOODWORK	55 59 29 24 60

ENROLMENTS IN SPECIAL SECONDARY SCHOOLS

CAPE PROVINCE

SCHOOL	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
BATAVIA CLAREMONT												124	200	273	301	293	345	380
BAYSVILLE EAST LONDON				59	103	98	86	93	125	178	209	221	201	199	214	243	253	269
VAN KERVEL GEORGE										62	88	87	115	123	143	162	206	258
MONUMENT KIMBERLEY					62	84	99	96	91	99	98	100	100	103	106	122	153	172
WESTCLIFFE BELLVILLE	89	118	123	145	158	160	180	194	231	258	276	266	241	274	283	305	331	351
WESTVIEW PORT ELIZABETH									173	220	204	207	226	234	236	250	283	298
UITENHAGE UITENHAGE						95	145	183	218	201	181	199	193	180	175	190	227	280

in the same year 6 738 pupils in special classes. How many were of a standard to progress to a special secondary school is difficult to say, because pupils progress at their own pace in each subject, but what can be said with certainty is, that there are not yet enough of these schools and so the standard required for admission is high compared with some other Provinces. It is also generally recognised that the standard of the practical work produced is high.

6.3.3. The Curriculum at Special Secondary Schools.

In Mr. Liebenberg's speech he said that the aims of the Junior Secondary Course (Vocational training) were as follows:-

" The Junior Secondary Course (Technical) provides for the post-primary education of the mentally deviate (retarded) child. In addition to practical pre-occupational training, the course includes subjects of general educational value. It affords the teacher an opportunity to adapt the content of the course to the particular needs of individual pupils. This implies, as a first essential, a diagnostic approach to the pupil himself and thereafter, for each of the subjects taken, an adaptation of the learning material to his particular needs and ability.

Mental deviates will, therefore, receive in this course a type of education essentially different from that normally given in a primary school: it is post-primary education with a vocational bias. In the Special Classes in primary schools, the aim is to assist the pupil to adjust himself to the occupation he will follow in later life. For this reason, whatever will be of value to him in his intended occupation is emphasised. What is taught should not only prove of value to the pupil indirectly and in the general educational sense, but it should also be deliberately selected and directed towards promoting practical pre-occupational training.

In addition to offering a training in practical subjects, provision is also made in the course for instruction in the two official languages, general mathematics, and social studies. Even in the teaching of the two last-named subjects, the adjustment of the pupil to his future occupation should be the goal. What is taught in these subjects will

have to be selected, therefore, with a view to the pupil's needs and will have to be closely integrated with his practical work. And, when the subject matter is actually taught, differences in the scholastic progress of each pupil in the different subjects will have to be constantly borne in mind from the moment the pupil enters the course and for the duration of the course."

The Superintendent-General then went on to explain that the syllabuses for the various subjects should not be regarded as prescribing a fixed course of study but as indicating directions and general principles, thus ensuring clarity and continuity. He stressed that careful planning of daily, weekly, monthly and yearly schemes of work was of vital importance.

The course is of three years' duration. In addition to the subjects mentioned above, Bible study, physical education and class music, are non-examination subjects. The school time-table is so arranged that pupils spend alternate days in the workshop and in the classroom. [1]

Boys have a choice between carpentry and joinery, sheetmetalwork, motor body repairing, welding, spray painting, painting, signwriting and window dressing. Girls choose between domestic science, needlework and hairdressing. [2] *It is planned to add motor mechanics and hairdressing to the boys' and institutional management to the girls' trades.*

The ratio of pupils to teacher is kept low so that the maximum individual attention may be given to pupils.

Sports and other recreational facilities are provided on a generous scale because of their value in rehabilitation. [3]

It must be stressed that the emphasis is on practical work and success in this is the requisite for promotion. These pupils' abilities are in the practical arts and they master abstract and academic concepts only with difficulty. When transferred to the special secondary school

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1. *'Rehabilitasie van moeilike aanpasbare leerlinge in skole van die Kaapse Onderwysdepartement.' Op cit. p.108.*
2. *Ibid. p.108.*
3. *Ibid. p.108.*

their academic standard is about standard IV. It is found, however, that when they begin to make progress in their practical work, their academic work improves, probably due to the development of self-confidence and the additional factors that they are growing up and becoming more socially adjusted. The object in the academic subjects is to reach at least the standard VI level. Some pupils, in fact, do progress beyond this standard in one or more subjects and some even reach standard VIII level [1] in all the subjects. Pupils are grouped according to their individual needs in any particular subject so that they may be, for example, in a special group trying to reach English standard VI level, be in a different group taking standard VII Afrikaans and in standard VIII groups for general mathematics and social studies. To pass in an academic subject they have to obtain 33⅓% of the maximum marks. The type of paper set is adjusted to the pupils being examined but, and this is to be stressed, the standard of achievement required is not lowered.

As far as is possible a pupil entering a special secondary school is allowed a choice of the practical subjects offered at that school. If progress is not satisfactory, another subject is tried and, if necessary, another, until the subject in which success is likely to be obtained is found. This exploratory process, of course, occurs in the first year at the school. Since the rehabilitation of the child depends so much on achievement in the practical work, much care is given to this finding of the correct practical subject.

6.3.4. Certification

If a pupil at the end of the three year course obtains at least 50% of the maximum mark of 600 in the practical subject, he is awarded the Junior Certificate (Vocational Training). The examination consists of a practical test and a trade theory (written) paper. The marks allocated to these depend on the trade but quite often the allocation

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1. S.G.E's speech. 24th March, 1961. Op cit. File L1/117/41/04.

is 300 marks for the practical test and 100 for the theory. The balance of 200 marks (maximum) is for the course work. This scheme is being investigated at the present time and may be altered for some or all trades. It has been suggested, for example, that the maximum marks for course work be reduced to 150 and the 50 marks then available be added to the 300 for the practical test. This may not be acceptable in all trades. There is, for example, a very great difference in the type of practical test set in welding, in panel beating and in woodworking. There will also be different weights placed on the course work. The same differences will exist in the examining of the various components of the subject domestic science and, say, ladies' hairdressing.

As far as the academic subjects are concerned, the highest standard passed in these subjects is endorsed on the certificate but it must be stressed again that the sole condition for obtaining a Junior Certificate (Vocational Training) is passing in the practical subject. A candidate who scores at least 450 out of the maximum of 600 marks for this subject obtains the certificate with distinction.

A typical certificate is shown on page 312.

The general principles underlying this branch of secondary education have now been discussed. Certain terms have been defined. The history of the existing schools will now be outlined.

6.4. Westcliff Special Secondary School

Something of the history of this school was gleaned from paragraphs 6.1. and 6.3. of this chapter. There was in Tamboers Kloof a primary school called Westcliff Primary School. It had a large number of special class pupils. The Cape School Board requested Dr. N.J. du Preez, the Departmental Psychologist, to experiment with a post-primary course for these pupils. The Board considered the building suitable and so in 1953, with the aid of a grant of £7 000 from the Provincial Executive Committee, a technical training course for 97 mentally-retarded pupils was approved and four instructors appointed. In the course of the next three years the Board became unhappy about the primary and secondary pupils sharing the same building. Hence in July 1956, the primary

No.....

DEPARTEMENT VAN ONDERWYS
KAAP DIE GOEIE HOOP

DEPARTMENT OF EDUCATION
CAPE OF GOOD HOPE

JUNIOR SERTIFIKAAT (BEROEPSOPLEIDING)
JUNIOR CERTIFICATE (VOCATIONAL TRAINING)

Hiermee word gesertifiseer dat — *This is to certify that*

gebore/born

aan al die eksamenvereistes voldoen het vir die Junior Sertifikaat (Beroepsopleiding) in

has satisfied all the examination requirements for the Junior Certificate (Vocational Training) in

Daarbenewens het die kandidaat aan die vereistes voldoen om te slaag in:

In addition the candidate attained the required standard for a pass in:

VAK - SUBJECT	STANDAARD - STANDARD
.....	Standerd / Standard.....
.....	Standerd / Standard.....
.....	Standerd / Standard.....
.....	Standerd / Standard.....

Eksamenbeampte
Examinations Officer

Direkteur van Onderwys
Director of Education

Datum van uitreiking
Date of issue

A.F..C.T. G00885/1/70 600

pupils were distributed between other primary schools in the area and Westcliff became the first special secondary school in the Cape Province. It had then a staff of 13 teachers and there were 145 pupils.

There was at that time, no very clear picture of the exact function of this type of school in the educational system of the Province, still less idea, therefore, of how this function was to be carried out. All that was obvious was that an unusual school had been established which was likely to give a decisive answer to the critics of the special class system by showing that special class education could proceed beyond the primary stage.

This school, not being a community school, could not have an elected school committee. An Advisory Committee was appointed by the Superintendent-General of Education, Dr. J.G. Meiring. It consisted of Mr. J.B. Bonthuys, Mr. J.J. Blom, Advocate J.H. Conradie, Mr. H.R. van der Poel, Advocate J. de la R. du Toit, Mr. A.B. van Niekerk and Mrs. P.E. Pocock.

It was not long before it was realised that the Westcliff building was not suitable for the type of instruction being given. The risk of accident was ever present. In 1955 the Departmental Psychologist reported after an inspection, "One must be thankful that things have proceeded until now without a serious accident". The school soon outgrew the building and the site and a search for a new site was initiated. The site of the present building in Bellville, 5 morgen in extent, was bought for R20 000. In the planning stage it was realised that this site was too small to provide also for the erection of a hostel for 80 boys. Additional ground adjacent to the site was acquired and the hostel built. Thus the school buildings and the boys' hostel stand on a site of approximately 6 morgen.

There has been a proposal to erect a girls' hostel for this school. This would necessitate the acquisition of more ground very near to the school. No final decision has been taken yet. It is essential that boarding facilities for girls be made available but naturally it does

not matter whether they are provided at Westcliff or at any future special secondary school in Cape Town.

6.5. Baysville Special Secondary School, East London.

According to the statistics, this school opened in 1956 with an enrolment of 59 pupils. The site for the school was purchased from the South African Railways for £27 500. It was an old orphanage. Including four plots generously donated by the Municipality, the site area was 13 acres.

At first the old orphanage building was used as the school building but new buildings were planned and, since there was a big demand from the Border area for this type of education, it was proposed to use the old orphanage as a boys' hostel when the new school buildings were erected. It was realised in the planning stage that when the new school buildings and workshops were erected, there would be little of the thirteen acres of ground left over for providing the necessary recreational facilities, which are even more necessary in a school of this type than in an ordinary boarding school. Hence an additional four erven of ground, 1.106 acres in extent, adjoining the school site were acquired in 1959. The school buildings when completed cost R240 044.

By 1967 the need for further extensions to the school was very obvious and the Secretary of the Advisory Council of the school, advised the Secretary of the School Board of East London of the fact. He said that not only did the school buildings need extending but that a new hostel for the sole use of girls was needed, so that the existing hostel could be used by boys only. The school needed a swimming bath. Ground adjacent to the school of approximately 2.2 morgen was available and this ground was acquired in June 1969.

It is now possible to extend the school and take up to about 400 pupils, which is likely to be the future enrolment policy for these schools. [1]

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1. Details extracted from Departmental files. L1/83/12/04 and L3/83/12/2.

6.6. Monument Special Secondary School, Kimberley..

The first steps towards establishing a special secondary school in Kimberley were taken in 1965 when, in November of that year, a site 108 500 sq. ft. in area adjoining the Central Primary School, was acquired from de Beers. The area of this latter site was 170 000 sq. ft. but this was fully built up and it was necessary to have the extra ground for a hostel building. The greater part of the primary school building was converted at a cost of £10 000 into the special secondary school whilst the remainder - two teacher's houses and an office of the Clerk of Works - was temporarily converted into a hostel for boys. The intention was to erect a hostel and a study hall on the 108 500 sq. ft. site for 80 and 120 boys respectively. Girls were then to be accommodated in the hostel vacated by the boys.

However, at the end of March 1960, after the school had been in operation since 1957, the Kimberley School Board requested that new school buildings and hostels be erected on a new and more suitable site. Their objections to the original site were -

(a) that it was too small to provide the necessary facilities for a pupil enrolment of 250, including boarders;

(b) that it was situated in an area where no ground for further extension was available;

(c) that the school buildings were already 75 years old; and

(d) that the school was near a mine and a shunting yard of the South African Railways and hence had to contend with factors like excessive noise and dust.

These objections were upheld by the Department and the search for a new site began. An apparently suitable site of about 7 morgen was found in a new, undeveloped suburb named Royldene but progress with the development of this suburb was so slow that it was found impossible to delay the planning of the new school further.

In February 1963, another site of 8.1 morgen was found in the Golf Course Extension suburb, on which a school building, a hostel

for 80 boys and 40 girls and sports and recreational facilities were to be provided. Architects were appointed on 18th. March, 1964, but the planning had been somewhat amended and was to include two hostels for 80 boys each and a girls' hostel for 60, as well as the usual school buildings and workshops. The architects reported that the site was too small to provide all these facilities and recommended that another site be found.

Several approaches were made but it was only on the 6th. February, 1970 that a site of 12.1672 morgen was finally acquired and the architects are now busy with the planning of the new school on this site in Monument Heights. [1]

6.7. Uitenhage Special Secondary School.

This school started as an ad hoc special secondary school in the fourth quarter of 1958, with an enrolment of 95 pupils. Previously, from 1954 until 1958, these post-primary classes were divided between the Innes, Dolley and Jordan primary schools. [2]

The site acquired was that of the vacated Queen Victoria Hospital of about 1½ morgen and an adjoining ½ morgen of ground for recreational facilities, mostly for the girls (tennis and netball). For the boys the sports ground of the Dolley School was acquired when this school transferred to new buildings. This ground was used, usually, for football but on occasion for athletics.

In a report dated 6th. December, 1963, the Provincial Architect said that the buildings were never completely suitable for a school and that they were in poor condition. He was not able to recommend that any more money be spent on them and felt that a new site should be found and new school buildings and hostels provided. This advice was taken and another site, 15.8 morgen in extent, obtained at a nominal price from the Uitenhage Town Council in September 1964. Architects were appointed to design a school building containing eight classrooms, a trade theory room, a hall, a library and rooms for domestic

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1. Details extracted from Departmental file L 3/80/12/1.
2. Inspection report dated 19th. November, 1959.

science, for needlework, for laundrywork and for hairdressing. Workshops for woodwork, sheetmetalwork and welding, painting, panel beating and spray painting were to be provided. There were to be 250 pupils. The sketch plans were approved in December 1967 but by February 1970 it was realised that there would have to be extra accommodation so that 310 pupils could be catered for. This involved the addition of two more classrooms and a further domestic science room specially designed for those girls who would take institutional management as their practical subject. It meant, too, that the hall would have to be enlarged to accommodate 400 people. This is the reason why the school still occupies the old site and struggles to obtain results in old buildings which are not suitable for the work, not so much in size, but in design which, for example, limits the quantity of natural light and, in the case of welding, makes proper screening of the electrical arc welding rays difficult. The panel beating is done in an old wood and iron building that used to accommodate the outpatients of the hospital.

The hostel was the old nurses' quarters and was, therefore, the only part of the building which could be considered entirely suitable for the purpose to which it was put. Most of it was first occupied by boys (in 1964 by 64 boys and 19 girls). Eventually another building was brought into service as a temporary boys' dormitory so that in 1969 there were 70 boys and 20 girls in the school hostels. [1]

The new hostels will accommodate 100 boys and 50 girls. The building work is now under way and it is hoped that the school and hostels will be finished by the end of 1971.

6.8. West View Special Secondary School, Port Elizabeth.

As was the case in Uitenhage, so it was in Port Elizabeth, that the post-primary special education was at first distributed amongst a number of primary schools. The girls received their domestic science training at Piet Retief primary school. This was started in 1954 and was intended to be given there only for one year. In fact, on the

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1. All details extracted from Departmental Files. L 3/162/38/1, 2 and 3.

3rd. October, 1958, the secretary of the School Committee wrote to the School Board in Port Elizabeth, pointing out this fact and requesting that this group of girls be removed by the end of 1959.

Panel beating and spray painting was given from 1956 at the Dagbreek Primary School and this was to be given there for possibly one and certainly not more than two years, according to a letter of complaint to the School Board in May 1959.

Painting and decorating, which was not, according to the records, a very popular choice of trade, was taught at the Cunningham Primary School, woodwork at the Excelsior Primary School, and sheetmetalwork at the North End Grey School.

This was, of course, not a desirable state of affairs either from the point of view of the post-primary pupils whose training was not coordinated under one head teacher, nor from the standpoint of the primary pupils who necessarily had to come into contact with an older and less well mentally endowed group of pupils, nor from the point of view of the head teachers of the primary schools who had to carry the responsibility for these post-primary pupils and were not remunerated for the extra work that they had to undertake.

It would be difficult to attempt to blame any one body for this state of affairs nor would it be of any value. In large cities it is always difficult to secure suitable sites for schools, particularly if playing fields are to form part of the complex. Much time is taken over the legal aspects of conveyancing and transfer and then, after architects, quantity surveyors and engineers have completed their work, tenders have to be called and then at least two years allowed for the building contractors to erect the buildings. In point of fact, if all these considerations are taken into account and when it is realised that the site at West View became the property of the Educational Trustees on 25th. October, 1957, the opening of the school in January 1961, was a reasonable achievement. The site was originally 4.0772 morgen, (but 66 082 sq. ft. - $1\frac{1}{2}$ morgen - extra ground was acquired in September 1969, from the Municipality of Port Elizabeth). Sketch plans were

approved on 13th. September, 1958, and the final plans on 8th. December, of the same year. Then the quantity surveyors had to do their work and the tender date was eventually set for 4th. August, 1959. Hence the school was erected in about 16 months, which was unusually fast, even if allowance is made for the fact that there are no hostels.

The schedule of accommodation included 8 classrooms, 1 domestic science room, 1 needlework room, 1 room for laundrywork and ironing, a library, a hall, a hairdressing salon and workshops for woodwork, sheetmetalwork, painting and decorating, and panel beating and spray painting.

In October 1964 approval was given for the erection of a trade theory room and for the enlargement of the sheetmetalworking shop to allow of welding being introduced as a trade subject. Extra storage space was also provided for the woodworking, panel beating and sheetmetalworking shops.

That represents the position today but extra ground for sports facilities is being sought and may be provided on the site of the Government Garage when that shifts to its new site. [1]

6.9. Van Kervel Special Secondary School, George.

The School Board in George first approached the Department about the necessity for establishing a post-primary course for mentally-retarded pupils in the George area in December 1952, recommending that an old school and hostels be bought from the Dutch Reformed Church for £60 000. The Department considered this price too high but regarded the provision of a special secondary school for this area to be very necessary. According to a report to the Superintendent-General of Education from the Departmental Psychologist, Dr. N.J. du Preez, in the area George, Knysna, Mossel Bay, Brak River and Oudtshoorn there should have been about 1 000 pupils in special classes and that those between the ages of 14 and 15 years should be in post-primary classes. He estimated that there should be provision for between 250-300 such children.[2]

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1. All details extracted from Departmental files L3/126/69/1, 2 and 3.
2. Report to S.G.E. from Departmental Psychologist. 23rd. November, 1953. File L3/56/39/2.

On 18th. February, 1954, Dr. du Preez recommended the purchase of 4 morgen of ground at Appelboord at £1 000 per morgen. He regarded the site as well-situated and to be good building ground and asked that pre-fabricated classrooms and workshops be provided so that a start could be made with the post-primary course. He suggested that 4 classrooms, a domestic science room, a woodwork shop, a painting and decorating shop, and the usual offices and storerooms be provided as quickly as possible.

The Appelboord site was purchased for £3 000 on 16th. November, 1954. The plan to erect temporary buildings was not approved.

On 18th. June, 1956, an architect was appointed to erect a new building including 4 classrooms, a domestic science room, a washing and ironing room, a hall for 250 pupils, a workshop for woodwork and another for panel beating and spray painting.

On 29th. May, 1957, the Superintendent-General of Education, Dr. J.G. Meiring, informed the Provincial Secretary, that only about 60 mentally-retarded pupils would be drawn from George itself and that it would be necessary to provide hostel accommodation for 100-110 boys and 60-80 girls. He recommended the purchase from the Algemene Armesorg Kommissie of the Dutch Reformed Church, the hostel Eikenhof which would accommodate about 100 boys and the erection of a hostel for girls on the school site. Eikenhof was purchased for £28 900, according to a letter dated 4th. December, 1957, from the Provincial Secretary to the Superintendent-General. On 10th. February, 1958, the Secretary of the Education Department informed the School Board at George of this purchase and asked what the School Board proposed to do with Eikenhof, since the new special secondary school would not be completed for at least two years.

The provision of hostel accommodation for 160 pupils implied that the school would have to accommodate 250 pupils eventually. This meant that more practical work would have to be provided and more classrooms. The Provincial Secretary was requested, therefore, on 26th. February, 1958 to add to the accommodation already requested, 4 classrooms,

a library, a larger staff room, a workshop for sheetmetalwork and a workshop for painting and decorating.

In order to avoid congestion on the original Appelboord site by the addition of a girls' hostel to accommodate 60 girls, an adjacent site of 5 morgen was purchased on 21st. September, 1959, of which 3 morgen was to form part of the special secondary school site and the other 2 morgen reserved for a future preparatory school.

On the 16th. March, 1960, it was decided to add hairdressing salons to the special secondary schools at East London, Port Elizabeth, George, Kimberley and Uitenhage.

A portion of the school was finished in time for 62 boys to enter the school in January 1962. They occupied three classrooms, the woodwork shop, the sheetmetalwork shop and the panel beating and spray painting shop. The rest of the school was completed in time for opening in the first term of 1963. [1]

6.10. Batavia Special Secondary School, Claremont.

In a report from Dr. N.J. du Preez to the Superintendent-General of Education, Dr. J.G. Meiring, dated 3rd. March, 1955, he wrote that he visualised that a second special secondary school would be required in the Cape Peninsula and that it would have to be built in the Cape School Board area, to provide accommodation for those pupils who would find it difficult to reach Westcliff, Bellville and who would not, in the course of time, be able to be accommodated in Westcliff. The Cape School Board was very enthusiastic about the scheme for providing post-primary education for mentally-retarded children and did all it could to expedite the scheme, despite several recommendations from Dr. du Preez, the last dated 11th. August, 1958, that there was no urgency for the school. He was obviously anxious to see how the scheme worked out at Westcliff and to provide the more urgently required schools that have been described in the previous five sections of this chapter.

However, the Cape School Board was requested on 16th. November, 1955, by the Department to recommend a site for the school, since the

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1. All details from Departmental files. L3/56/39/1,2 and 3.

Department was not in favour of using either Westcliff Primary School site which had been used temporarily by Westcliff Special Secondary School, nor any other school recently vacated. It had, in view of its experience, decided that it was best to build ad hoc special secondary schools.

On the 16th. January, 1959, a site of about $7\frac{1}{4}$ morgen was purchased at Claremont for £14 872. This did not completely satisfy the School Board which requested on 3rd. June, 1964, that additional, adjacent ground be acquired to provide sports fields for the proposed new school. On investigation it was found that the cost entailed was R100 000 and the Provincial Secretary requested the Cape School Board to re-investigate the position.

In the meantime, Dr. du Preez had proposed that the new school should be built for 250 pupils and that the accommodation should include, besides the usual offices and stores, 8 classrooms, 1 domestic science room, 1 needlework room, 1 room for washing and ironing, a library and a hall. Workshops should be built for woodwork, sheetmetalwork, painting and decorating and for panel beating and spray painting.

The architect was appointed on 16th. July, 1959, but before he had completed his sketch plans he was asked to include a hairdressing salon. His sketch plans were approved on 3rd. May, 1960, and he was asked to prepare working drawings and co-operate with the quantity surveyors and engineers to prepare documents for tender. Tenders were eventually called for by January, 1962 and a tender of R266 666 accepted. The building work was completed in December, 1963 and the school opened in January, 1964, with an enrolment of 124 pupils, a principal teacher, four teachers for the academic subjects and instructors for all the practical subjects.

In October, 1964 extensions were requested to include a trade theory room, extra room for welding in the sheetmetalwork section and extra storage space in all the workshops.

In October, 1967, $1\frac{1}{3}$ morgen of sports grounds were acquired for R22 000, so that the school site is now $\pm$ 9 morgen in area.

The question has been asked "Why Batavia Special Secondary School?". It will be remembered that it was in what Dr. E.G. Malherbe has called the 'de Mist Interlude' - the time of the Batavian Republic in the Cape - that Commissioner de Mist attempted to introduce the first form of vocational education - commercial in nature - into the schools. It was considered by the school committee, especially in view of the fact that the city of Batavia has been re-named Djakarta, that this brief period in South African history be commemorated by naming this vocational school 'Batavia'. [1]

The school was officially opened on 19th. March, 1965, by the Superintendent-General of Education, Dr. G.J.J. Smit. Some extracts from his speech on that occasion will be used as a conclusion to this chapter.

6.11. Teachers of Special Classes

The teachers of the academic subjects in special secondary schools are required to have undergone special training for this work. The course is offered at the University of Cape Town and at the University of Stellenbosch.

The entrance qualification is the possession of a teacher's certificate approved by the Faculty of Education and the candidates must be recommended for admission to the course by an Inspector of Education, or by the Head of a Training College or Department, or other person approved by the Senate.

The course is of one academic year's duration. The curriculum varies slightly at the universities concerned.

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1. All details extracted from Departmental files L3/32/125/1,2 and 04.

University of Cape Town [1]	University of Stellenbosch [2]
A. The Psychology of the Deviate Child.	Didatics of Special Education.
B. Organisation and Practice of Special Education.	Practice Teaching in Special Classes.
C. Theory of Special Education.	Philosophy of Education.
D. Special methods of teaching suitable to backward children:	History of Special Education and a comparative study thereof.
(a) Lectures in the following subjects: English, Afrikaans, Arithmetic, History, Geography, Nature Study, Hygiene, Civics and Vocational Studies.	Special Educational Psychology and Sociology.
(b) Teaching and observation.	Handwork
E. Educational Handwork.	Religious Instruction.
F. Teaching Practice in selected schools.	
G. Attendance at Child Guidance Clinic.	
H. Method of Speech (English and Afrikaans).	

As far as the instructors in the vocational subjects are concerned the majority have had no training in education. Many do not qualify for the course described in Chapter 11 for workshop teachers because of low academic achievement. However, they are being encouraged to improve their academic and technical qualifications because they have the same opportunity as the teachers in technical high schools and agricultural high schools to proceed to the training course for workshop teachers at the Pretoria College for Advanced Technical Education. With improved academic and technical qualifications and a teaching certificate they do, of course, qualify for better salary scales and for promotion posts.

Despite what has been written above about the low academic and technical qualifications of many of the instructors, the quality of the work produced in the workshops of the special secondary schools is very high and inspectors of the trade subjects have reported most favourably on it. Improvement in the trade theory side of the work might, however, result from a training in the presentation of this subject matter and of an understanding of the basic psychology and sociology of the deviate child.

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1. From the 1970 handbook of the Faculty of Education, University of Cape Town.
2. From the 1970 handbook of the University of Stellenbosch.

6.12. Conclusion

"Schools exist" said Dr. Smit "for the purpose of imparting useful knowledge to the child and of helping him in the task of character training. The school is therefore a very important agency in preparing the youth for good citzenship. It assists the child in developing into a useful young man or woman who can serve the community and the country well." [1] He went on to mention various types of schools, pointing out that each had a curriculum and teaching methods planned in accordance with the mental development of its pupils. He spoke of the principle of individual differences which is now recognised, and explained that the special secondary school was developed for pupils who, because of their mental development, were more suited to practical work in a trade than to more intellectual tasks. He estimated that in the Cape Province 5% of the pupils in primary schools were in this category. The actual number of such pupils was about 7 300.

He said that the special secondary school in the Cape Province was unique and in some respects gave a lead to the rest of the world. It was a very costly form of education but the results in producing from unpromising material people capable of independence and self-support justified the high costs involved.

Dr. Smit pointed out, and this is the experience of educationists who have anything to do with these schools, that the pupils are interested in their work and obviously happy. Hitherto they had been frustrated and unhappy.

In this respect then, these schools are fulfilling an extremely useful task. The problem of frustration will be discussed in Chapter VIII. Let it suffice now, then, to state that in these schools pupils are encouraged to reach their own ceiling of achievement and that this level of achievement often surprises even the pupils themselves.

Judging from the results obtained and the number of pupils who cannot yet be admitted to this type of training, more schools of this type are needed. One, for Saldanha, is in the planning stage. Another, for the Milnerton area of the Cape Peninsula, is proposed. Most of the existing ones will be expanded to take 400 pupils each. Yet more will

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1. Speech made by S.G.E. Dr.G.J.J.Smit at opening of Batavia Special Secondary School, 19th. March, 1965. File L1/32/125/04.

be required and the immediate problem to be faced is the training of enough teachers and instructors.

CHAPTER VII

Academic High and Secondary Schools

7.1. Introduction

The purpose of this chapter is not to give any historical detail of the academic high and secondary schools in the Cape Province, because this is not part of the theme of the thesis and in any case, there are many theses that have been written about this aspect of educational evolution in the Cape. The matters to be discussed are the purpose of these schools, their curricula, where it seems necessary to elaborate on what has already been written, the geographical distribution of these schools and a general idea of the sizes of the schools and how this affects the curricula of the schools. This discussion should then lead via Chapters VIII and IX to Chapter X in which the types of school required in the Cape Province to serve best the educational welfare of the pupils, the communities and the country as a whole, will be dealt with.

7.2. Some Physical Features of the Cape Province

The area of the Cape Province is 278 465 square miles and forms 59% of the Republic of South Africa.[1] The land surface rises in four plateaux. The coastal plateau has an average altitude of 500 to 600 feet, is fertile and varies in width from 3 miles to 30 miles. The Little Karoo is a narrow tableland some 15 miles in width with an average altitude of 1 500 feet and, by man's ingenuity, made fertile

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1. Year Book and Guide to Southern Africa. Cape Town. Howard Timmins. 1965. p.23.

in many parts. It is separated from the coastal belt by the Outeniqua and Langeberg Mountain Ranges. [1] Then there is the Great Karoo with an average altitude of 2 000 to 3 000 feet, bounded on the West by the Cedarberg and Bokkeveld and to the South by the Witteberg, Zwartberg and Zuurberg Ranges. [2] There are peaks in these ranges rising to 6 000 feet and even to 7 000 feet, and its total area is about 30 000 square miles. Yet it is hard to say where the Great Karoo ends and the Northern Karoo or High Veld, of average altitude 4 000 feet, begins. They merge and sweep across to the North West, to Sutherland and the Roggeveld and Hantam, and beyond even into Namaqualand. Most of this huge area is sheep country. [3] Some is used for cattle farming. The Great Karoo and the High Veld comprise the greater part of the Cape Province. [4] These physical features of the Cape Province have a profound influence on the climate of the Province and they have, since the earliest times of European settlement of the Province, had a very great influence on education.

In the introduction to Chapter 11, Adriaan Smuts was quoted. He gave eleven reasons why vocational education was slow in developing. Amongst these reasons were the sparseness of the population, expensive transport and retarded administration owing to great distances. The slow development of other forms of education are attributable to the same reasons and this was discussed in connection with rural and agricultural education in Chapter V.

To explain the term "sparsity of population", the following figures are quoted from the Statistical Year Book, 1966, which gives an analysis of the 1960 census figures. The total population of the Cape Province was 5 360 000 of whom 1 001 000 were Whites, 1 330 000 Coloureds, 18 000 Asiatics and 3 011 000 Bantus. Of this population 2 331 000 dwelled in urban areas, 811 000 Whites (81.1%), 878 000 Coloureds (66%),

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1. Ibid. p.23.
2. Ibid. p.23
3. Lawrence G. Green. "Karoo". Cape Town. Howard Timmins. 1959. pp.11& 12.
4. Year Book and Guide to Southern Africa. Op cit. p.23.

nearly all the Asiatics (99.4%) and 625 000 Bantus (20.7%). Thus for the rural areas there were 190 000 Whites or 18.9% of the White population which works out at 0.7 per square mile. For the Coloureds there were 452 000 or 34% or 1.6 per square mile, for the Asiatics virtually none live in rural areas and for the Bantu folk 2 388 000 live in the Platteland, that is 79.3% or 8.6 per square mile.

Thus the Bantu represent more than 78.9% of the rural population and at the other end of the scale the White population of the Platteland is only 6.4% of the total rural population. [1]

Many of the problems which existed in earlier times have been overcome. There are many good roads and communication is much easier. There remain, however, problems peculiar to the Cape Province and which exist because of the vast expanse of sparsely populated land. There are comparatively few towns and villages in this area and the distances between them are, in many cases, great.

7.3. Academic Courses in Cape Provincial Schools

The Cape Education Department offers in its academic (or ordinary schools) three courses. The Primary Course provides for the education of children from the age of $5\frac{1}{2}$ to the age of $12\frac{1}{2}$ years, the aim of the course being to allow the pupil to develop as fully as his ability makes possible. "For this purpose:

(a) he should gain such knowledge (i) as is necessary to him at his present state of development, and (ii) as will enable him to continue developing;

(b) he should acquire various skills, such as clear and correct speech, the ability to listen attentively, reading, writing, number work, the written expression of thoughts in balanced sentences, and the deft use of his hands;

(c) he should develop correct attitudes to himself and others, so that he may grow into a well-mannered and useful citizen." [2]

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1. Statistical Year Book, 1966. Pretoria. Department of Census and Statistics. Section A.
2. "The Primary School" Department of Education, Cape of Good Hope, Pamphlet E301. p.5.

This course includes the sub-standards A and B and standards 1 - V.

The Junior Secondary Course consists of Standards V1, V11 and V111 and normally, therefore, extends over three years. On completion of the course a pupil enters for the Junior Certificate Examination which is now a fully internal examination. "The educational principles set out above for primary schools also hold good for the education envisaged in the Junior Secondary Course.

The aim of the Course is to build on the broad foundation laid in the primary school and to provide further education of a general nature ..... . Its object is to provide an even and balanced development of the pupil - intellectually, spiritually, emotionally and physically." [1]

The Senior Secondary Course consists of standards 1X and X and is, therefore, normally a two-year course. On completion of the course pupils usually enter for the Senior Certificate Examination and may, in certain circumstances relating to subjects taken, and the grouping thereof, qualify for exemption from the Matriculation Examination.

The aims of the course are not stated in pamphlets,as they are for the Primary and Junior Secondary Courses. It is obvious enough, however, that the educational principles are the same - to provide a broad, general, formative training but in some subjects providing further education of a less academic nature and in other cases providing education which will lead pupils to further study at a university or other institution for further education.

7.4. Schools Providing Academic Secondary Education

In the Cape Province there are two types of schools providing academic secondary education. The first provides only the Junior Secondary Course although, in all but one case, they provide all or part of the Primary Course as well. This type of school is called a Secondary School. The second school referred to, called a High School, provides the Junior and the Senior Secondary Courses and in many cases all or part of the Primary Course as well.

7.4.1. The Secondary School

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1. *"The Junior Secondary Course" Department of Education, Cape of Good Hope. Pamphlet E321/0/1963. p.4.*

There are 45 secondary schools in the Cape Province. The table on page 332 shows the post-primary enrolment in these schools. There are six columns in the table. In the first column are given the post-primary enrolments of schools with a total enrolment (primary and secondary) of less than 100 pupils. The second column gives details of schools with a total enrolment of between 100 and 150, the third for schools whose enrolment falls between 150 and 200, and so on.

There is only one school, Klawer in the Vanrhynsdorp district, which takes only secondary pupils. Its enrolment was 78 pupils in 1968, 23 in standard V1, 36 in standard V11 and 19 in standard V111.

In all other cases it will be observed that primary pupil enrolment is far greater than the secondary enrolment. Thirty-one of these schools provide hostel accommodation because there is a rule, by no means a hard-and-fast rule, that school bus services are provided only for distances of up to twelve miles from a school.

The full details of these schools, for the last quarter of 1968 (the latest available complete statistics) are given in the table on page 333. It will be seen by comparing the number of teachers in the secondary departments with the number of pupils in standards V1, V11 and V111 of the respective schools, that in very few cases is an economical use made of these teachers. The pupil - teacher ratio is 11.51 to 1. In present circumstances of teacher shortage this position is not easily defensible. For the pupils, of course, it means much more individual attention than they would receive in larger schools and in some cases this may bring very desirable results. On the other hand it will be seen from the table on page 333 that in the standard V111 classes there are 21 groups with less than 10 in a class. In these groups there may be insufficient competition to induce the brighter pupils to give of their best work.

The subjects included in the curriculum for the Junior and Senior Secondary courses were detailed in Chapter 11. In standard V1 the only choice is in group V11 from which one of the following has to be taken either as an examination or a non-examination subject: woodwork,

STANDARD VI-VIII ENROLMENTS AT SECONDARY SCHOOLS WITH A TOTAL ENROLMENT OF LESSTHAN

100	150	200	250	300	400
18	31	35	42	47	107
27	23	47	55		
22	38	25	63		
78	31	49	84		
22	45	50	50		
27	29	42	55		
22	39	38	99		
	17	32	37		
	36	38			
	23				
	36				
	32				
	23				
	28				
	43				
	34				
	52				
	27				
	55				

SECONDARY SCHOOLS - CAPE PROVINCE

SCHOOL	TEACHERS			BOARDERS	RANGE OF STANDARDS	NO. OF PUPILS BELOW STD. VI	PUPILS ABOVE STD V				GRAND TOTAL	DIVISION
	SECONDARY	PRIMARY	TOTAL				STD. VI	STD. VII	STD. VIII	TOTAL		
RIEBEECK EAST	3	6	9	97	A - VIII	104	10	13	8	31	117	ALBANY
JAMESTOWN	3	5	8	56	A - VIII	90	8	11	4	23	113	ALIWAL NORTH
PORT ALFRED	3	8	11	-	A - VIII	154	17	8	10	35	189	BATHURST
MERWEVILLE	3	4	7	72	A - VIII	78	15	10	13	38	116	BEAUFORT WEST
GANSBAAI	3	9	12	-	A - VIII	166	18	10	14	42	208	CALEDON
GREYTON	4	4	8	26	A - VIII	90	15	10	6	31	121	CALEDON
STANFORD	3	5	8	30	A - VIII	88	17	15	13	45	133	CALEDON
BRANDVLEI	3	6	9	95	A - VIII	117	18	18	11	47	164	CALVINIA
LOERIESFONTEIN	3	7	10	109	A - VIII	137	28	14	13	55	192	CALVINIA
VAN WYKSVLEI	3	5	8	32	A - VIII	76	10	14	5	29	105	CARNARVON
LAMBERTS BAY	4	8	12	-	A - VIII	166	22	18	15	55	221	CLANWILLIAM
KANONEILAND	4	5	9	-	A - VIII	92	19	12	8	39	131	GORDONIA
HANOVER	3	6	9	30	A - VIII	79	6	7	5	18	97	HANOVER
DARLING	4	8	12	111	A - VIII	176	29	18	16	63	239	HOPEFIELD
VELDDRIF	5	13	18	-	A - VIII	334	50	38	19	107	441	HOPEFIELD
PATENSIE	6	7	13	7	A - VIII	130	25	25	34	84	214	HUMANSDORP
KLIPPLAAT	3	7	10	14	A - VIII	157	13	8	4	25	182	JANSENVILLE
POFADDER	3	7	10	78	A - VIII	149	23	15	11	49	198	KAKAMAS
RITCHIE	3	5	8	-	A - VIII	88	4	9	4	17	105	KIMBERLEY
BERLIN	4	10	14	29	A - VIII	152	19	22	9	50	202	KING WILLIAMSTOWN
FRANKFORT	3	3	6	50	A - VIII	74	11	18	7	36	110	KING WILLIAMSTOWN
KOMGA	3	8	11	60	A - VIII	159	22	22	11	55	214	KOMGA
VANWYKSDORP	3	3	6	36	A - VIII	55	11	8	8	27	82	LADISMITH
RIEBEEK WEST	5	8	13	116	A - VIII	140	45	29	25	99	239	MALMESBURY
GREAT BRAK RIVER	4	6	10	-	A - VIII	112	6	12	5	23	135	MOSSEL BAY
HERBERTSDALE	4	4	8	53	A - VIII	93	14	11	11	36	129	MOSSEL BAY
NIEUWOUDTVILLE	4	6	10	100	A - VIII	115	21	15	14	50	165	NIEUWOUDTVILLE
VOLMOED	3	5	8	31	A - VIII	87	13	10	9	32	119	OUDTSHOORN
PEARSTON	3	4	7	1	A - VIII	81	8	11	4	23	104	PEARSTON
PEDDIE	4	7	11	32	A - VIII	109	15	12	15	42	151	PEDDIE
PHILIPSTOWN	4	5	9	49	A - VIII	92	9	9	10	28	120	PHILIPSTOWN
REDELINGHUYS	4	3	7	49	A - VIII	67	8	18	17	43	110	PIKETBURG
HANKEY	3	5	8	-	A - VIII	99	16	9	9	34	133	PORT ELIZABETH
McGREGOR	3	4	7	-	A - VIII	71	6	11	5	22	93	ROBERTSON
COOKHOUSE	3	7	10	-	A - VIII	131	18	14	6	38	169	SOMERSET EAST
KAMIESKROON	4	4	8	77	A - VIII	93	19	12	21	52	145	SPRINGBOK
BRACKENFELL	4	13	17	-	A - VII	289	15	20	12	47	336	STELLANBOSCH
BALFOUR - KATBERG	3	7	10	2	A - VIII	131	15	9	8	32	163	STOCKENSTRÖM
SUNDAY'S RIVER	3	10	13	-	A - VIII	138	17	13	8	38	176	UITENHAGE
KLAWER	6	-	6	-	VI - VIII	-	23	36	19	78	78	VANRHYNSDORP
ALICE	5	7	12	-	A - VIII	167	10	17	10	37	204	VICTORIA EAST
VOSBURG	3	5	8	56	A - VIII	76	9	5	8	22	98	VOSBURG
BRAY	3	3	6	39	A - VIII	61	10	7	10	27	88	VRYBURG
ENGCOBO	3	5	8	26	A - VIII	76	14	4	4	22	98	ENGCOBO
CEDARVILLE	4	4	8	40	A - VIII	95	13	9	5	27	122	MATATIELE

STATISTICS FROM STATISTICS SECTION, EDUCATION DEPARTMENT

FOR 4TH. QUARTER 1968 (LATEST AVAILABLE)

agriculture, needlework and domestic science. Furthermore, at least 70 minutes per week has to be devoted to this subject if taken as a non-examination subject - more time if the subject is taken as an examination subject. Bearing in mind the fact that these secondary schools are co-educational in nature it is likely that what choice is permitted by the regulations is further restricted by this fact. One is inclined to suppose that the boys will take woodwork as the group VII and art as the group VI subject and the girls needlework or domestic science as the group VII and art as the group VI subject, since these subjects can be pursued further in standards VII and VIII. Agriculture is likely to be followed only by boys proposing to go on to the senior secondary course in the high schools at either Kakamas or George (Outeniqua).

In standard VII and VIII there are three compulsory subjects: an official language on the higher grade, an official language on either the lower grade or higher grade and general science. In group IV there is a choice between mathematics and bookkeeping - commercial arithmetic. A pupil who in the opinion of the Inspector of Schools cannot benefit from either of these subjects may be permitted to take as an alternative either

(a) social studies or a third language together with two of the following subjects: woodwork, agriculture, art or art-craft, needlework and dressmaking, domestic science, music, or

(b) social studies and a third language.

It is difficult to imagine these alternatives being allowed in a small secondary school in view of the number of pupils likely to be involved and the number of staff members available.

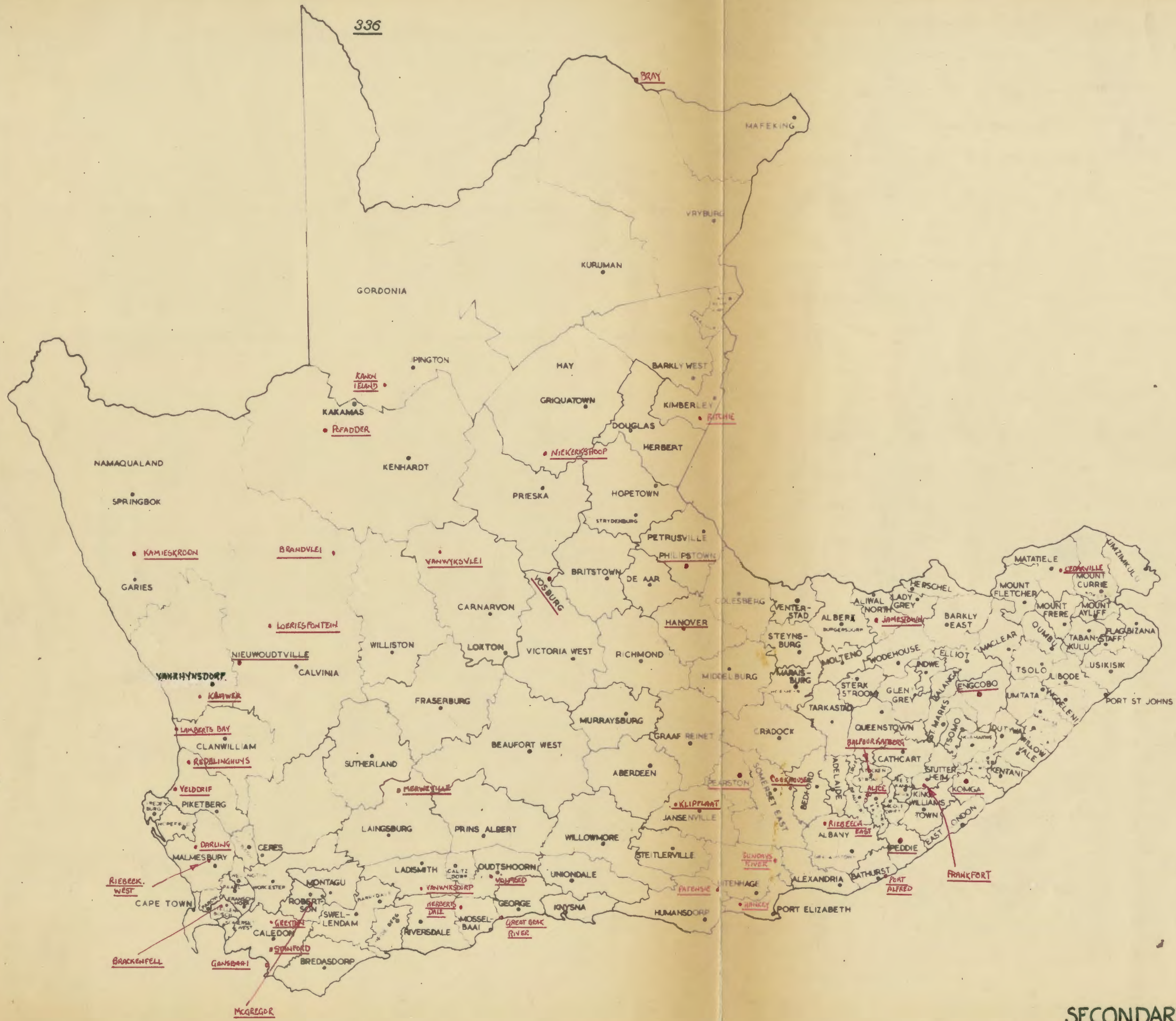
The fifth and sixth subjects have to be chosen from: mathematics (if not already taken as the group IV subject) bookkeeping - commercial arithmetic (if not already taken as the group IV subject) social studies, either French, German, Greek, Hebrew, Latin, Southern Sotho, Tswana or Xhosa, woodwork, art or art-craft, needlework and dressmaking, domestic science, music, typewriting.

It would appear that the choice will be limited by (a) the wishes of the majority and (b) the availability of specialist staff members. In addition the regulations state that typewriting may not be taken by boys unless bookkeeping and commercial arithmetic and either social studies or a third language are taken.

Without dilating further on the matter it is obvious that the size of the pupil-enrolment plays a very great, if not a decisive, role in determining the curricula of the secondary schools. This cannot be reconciled with modern thinking on education in which the pupils' interests are given very careful consideration.

A solution to the problem which comes first to mind is either to close these schools or to amalgamate certain of them. In point of fact the solution is not by any means as simple as that, though it must be said that some of the schools are becoming so small that they will eventually close for lack of pupils or become primary schools only. The map on page 336 shows the geographical situation of these schools. They are in small country towns or villages, remote from each other and in many cases far from the nearest high school. For a small town or village to have a boarding school is a source of income to that place and when suggestions are made that the school be closed there is, naturally, strong opposition.

A further analysis of the table on page 333 reveals that of the 7 087 pupils in these schools, 5 234 are primary pupils, 1 853 post-primary and 1 603 boarders. Unfortunately it is not possible to determine how many of these 1 853 post-primary pupils are boarders but one is led to the conclusion that, for the sake of their future careers, these post-primary pupils should be transferred to the nearest high school. They would then not have to transfer after standard VIII should they desire to follow the Senior Certificate Course and they are much more likely to have a wider choice of subjects. This aspect will be discussed further in the next section of this chapter when dealing with high schools. The proposal is, then, that these secondary schools should become primary schools, which they are to a great extent today.



SECONDARY SCHOOLS IN CAPE PROVINCE

7.4.2. The Academic High School

There are 220 academic high schools in the Cape Province (last quarter 1970). The table on page 338 gives an analysis of the enrolments in these schools in the last quarter of 1968, which are the latest available detailed statistics. The first column shows two high schools with a total enrolment of less than 100, for interest's sake, one at Aberdeen, with an enrolment of 96, all in secondary courses, 23 in hostels, and the other the Norman Henshilwood School at Constantia with an enrolment of 85, all in standard V1, as it was then a new school. There is no hostel.

The next column shows schools with a total enrolment of between 100 and 150. There it will be seen that in six cases the number of pupils taking secondary courses is less than 50% of the total enrolment. The first school is that at Karos-Connan in the Gordonia district. The total enrolment is 102 of whom 58 are primary pupils, 22 standard V1 pupils, 8 standard V11, 8 standard V111, 3 standard 1X and 3 standard X pupils. There is no hostel. There are 6 teachers for the secondary standards and 3 for the primary pupils. The next, for the sake of illustration, is the Jan Malan High School at Koringberg. The relative statistics are 6 secondary teachers, 4 primary teachers, 4 hostel pupils, 84 primary pupils, 12 standard V1, 5 standard V11, 7 standard V111, 10 standard 1X and 12 standard X pupils i.e. 46 secondary pupils out of a total enrolment of 130.

There is no point in giving detailed analyses like these for all the high schools. However, to complete this particular column, the names of the schools and some comment on each will be given. The third school is at Petrusville in the Petrusville district and it has 71 primary pupils. The next school is Aurora High School in the Piketburg district with 63 primary pupils. The fifth school is the Chinese High School in Port Elizabeth and all the pupils are in secondary courses, 33 in standard V1, 26 in standard V11, 20 in standard V111, 16 in standard 1X and 19 in standard X. The sixth school is the Paul Kruger High School at Steynsburg which has all its

STANDARD VI - X ENROLMENTS IN HIGH SCHOOLS

WITH TOTAL ENROLMENTS OF LESS THAN

100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
96	44	195	73	124	344	100	440	289	227	285	306	292	175	754		860
85	46	67	228	251	314	69	157	158	171	570	642	199	712	756		
	41	64	60	131	128	128	202	141	545	563	639	263	743	779		
	69	162	99	77	309	202	418	454	181	552	619	664		367		
	114	176	202	81	101	136	170	496	540	571	636	190				
	109	183	73	137	115	174	172	105	533	561	314	652				
	44	195	106	268	112	361	428	481	526	586	646	680				
	130	174	44	290	124	356	401	499	518	559	609	691				
	62	118	97	298	339	378	447	275		597	613					
		54	144	292	103	128	444	490		584	393					
		71	120	287	340	384	421	474		298	601					
		62	88	125	300	394	138	476		571						
		194	200	286	349	134	211	231		559						
		56	233	63	320	372	223	473		589						
		181	216	293	102	395	438	451		572						
		53	60	99	330	133	436			251						
		187	65	280	342	137	420									
			241	267	102	107	403									
			229	148	310		410									
			217	136	129		431									
			56	274	323		402									
			228	107	140		91									
			62	135	322		142									
			57	90	340		156									
			91	81	86		169									
				98	332		441									
					317		423									
					117											
					117											
					112											
					140											

pupils in secondary standards, 44 in standard V1, 28 in standard V11, 16 in standard V111, 9 in standard 1X and 12 in standard X. The seventh school is at Strydenburg and it has 98 primary pupils. The eighth school is at Lutzville in the Vanrhynsdorp district and has all its pupils taking secondary courses, 33 in standard V1, 29 in standard V11, 27 in standard V111, 19 in standard 1X and 22 in standard X - a very reasonable distribution of pupils. The last school is at Nuwerus in the same district, Vanrhynsdorp, but here there are 76 primary pupils out of a total enrolment of 138 pupils. Obviously the standard 1X and X enrolments must be very small (actually 3 in standard 1X and 7 in standard X).

Much of what has been said about secondary schools applies to the small high schools. In the sparsely populated districts primary and secondary pupils are accommodated in the same schools, the numbers in the junior secondary courses are small and those in the senior secondary courses far too small to be viable.

If the third column showing schools with a total enrolment of between 150 and 200 is examined, the position appears more satisfactory. Seven of the seventeen schools have an unsatisfactory secondary enrolment and, in fact, nine of these are high schools with no primary section. The school with a secondary enrolment of 118 has a primary enrolment of 42.

This type of statistical analysis could be continued but would lead to the same conclusion and so the results will be put in another way. Table No. 1. on page 340 shows the number of standard 1X and X classes with certain pupil enrolments. Table No. 11. on the same page summarises the position of high schools with regard to total secondary enrolment. In this connection it should be remembered that the complete high school course, that is to say, the Junior and Senior Secondary Courses, covers a period of five years. Hence in a high school with an enrolment of 100, the average pupils per standard number 20; and since there is a tendency for some pupils to leave

TABLE I

NO. IN STANDARD LESS THAN	NO. OF STANDARD VII CLASSES	NO. OF STANDARD VIII CLASSES
10	32	20
20	57	51
30	27	31
40	26	22
50	18	16
60	18	23
70	7	13
80	10	10
90	6	6
100	5	7
110	5	7
120	0	7
130	0	4
140	0	1
150	3	1
160	0	0
170	1	0
180	1	0

TABLE II

HIGH SCHOOL ENROLMENT LESS THAN	NO. OF SCHOOLS
100	38
150	41
200	21
250	15
300	18
350	18
400	9
450	16
500	9
550	5
600	13
650	8
700	4
750	2
800	3
850	0
900	1

after standard VIII, the general position will be that standard IX and X classes will be below 20 in enrolment. This position is summarised in table 1. on page 340. Thus in 32 high schools there will be one standard X class with 10 or less pupils (there are 9 high schools with a standard X enrolment of 5 or less pupils). There are a further 57 schools with standard X groups of 20 or less pupils. In these 89 schools there will be, therefore, only one standard X group, which fact must have a great influence on the elective subjects offered.

There is another way of analysing these statistics. Of the 220 high schools in the Cape Province, 118 offer only the secondary courses, that is to say are purely high schools. 30 of these are in the Cape School Board area and have an enrolment between them of 12 291 pupils. 10 are in the Parow School Board area and have a total enrolment of 5 360 pupils. 6 are in the Stellenbosch district and have a total enrolment of 2 696 pupils. Thus in this small area there are 46 schools with only secondary standards, accommodating 20 347 pupils. Eleven of these schools have hostels.

In Port Elizabeth there are 12 of these schools with a total enrolment of 5 802. Two have boarding facilities.

In East London there are 5 of these schools with a total pupil enrolment of 2 496. Three of these schools have hostels.

In Uitenhage there are 4 high schools with no primary section and their total pupil enrolment is 1 828.

Kimberley has 3 such schools, all with hostels, and a total pupil enrolment of 1 221.

Worcester has also 3 of these schools, all with hostels, and taking 1 061 pupils between them.

Thus in eight school districts there are 73 high schools with no primary standards and their total pupil enrolment is 32 755 which is more than 50% of the total "academic" high school population of the Cape Province (62 543 pupils).

On page 343 is an analysis of the pupil-teacher ratio for these districts, for the remainder of the high schools without primary departments, called for the sake of a name, "pure high" schools, for the remainder of the high schools, which are in sparsely populated areas in most cases, and then for the Province as a whole. It will be seen that for the well-populated areas there is a ratio of from about 19 pupils per teacher up to 22, whilst in the rural districts this falls to 14.51. The reason for this is that the application of the staffing quotas cannot be so strictly applied in the smaller rural schools because the subject choices would be even more limited than is now the case. This would be highly undesirable. The position perhaps needs a little more explanation at this stage.

Details of the curriculum for standards IX and X in these schools were given in Chapter 11. The position may be summarised as follows:-

(a) There are two compulsory subjects for the overwhelming majority of pupils - Afrikaans and English, at least one to be taken on the higher grade.

(b) A science subject is compulsory which, for all but two of the high schools (Martin Oosthuizen at Kakamas and Outeniqua at George), has to be selected from Biology, Chemistry, Physical Science, Physics, Physiology and Hygiene, and Zoology.

(c) Three other subjects have to be selected from

(i) Latin, Greek, German, French, Hebrew, Italian, Southern Sotho, Tswana or Xhosa;
(ii) Another language from (i) above;
(iii) Literature (either English or Afrikaans - Nederlands);
(iv) Mathematics;
(v) Biology;
(vi) Chemistry;
(vii) Physical Science;
(viii) Physics;
(ix) Physiology and Hygiene;
(x) Zoology;
(xi) Geography;
(xii) History;
(xiii) Art or Art-crafts;
(xiv) One from : Metalwork, Woodwork, Domestic Science, Needlework and Dressmaking;
(xv) Another subject from (xiv) above;
(xvi) Music;
(xvii) Accountancy (Minor) and Commercial Arithmetic (Minor);
(xviii) Snelskrif;
(xix) Shorthand;
(xx) Typewriting;
(xxi) Accountancy (Minor) and Typewriting (Minor);
(xxii) Typewriting (Minor) and Snelskrif (Minor) and Shorthand (Minor) - equal to two subjects.

PUPIL-TEACHER RATIOS IN HIGH SCHOOLS IN THE CAPE PROVINCE

	PUPIL ENROLMENT	NO. OF TEACHERS	PUPIL – TEACHER RATIO
CAPE TOWN "PURE" HIGH SCHOOLS	12291	610	20·15
PAROW "PURE" HIGH SCHOOLS	5360	266	20·15
STELLENBOSCH "PURE" HIGH SCHOOLS	2696	134	20·12
PORT ELIZABETH "PURE" HIGH SCHOOLS	5802	273	21·25
EAST LONDON "PURE" HIGH SCHOOLS	2496	113	22·08
UITENHAGE "PURE" HIGH SCHOOLS	1828	83	22·02
KIMBERLEY "PURE" HIGH SCHOOLS	1221	65	18·78
WORCESTER "PURE" HIGH SCHOOLS	1061	55	19·29
PAARL "PURE" HIGH SCHOOLS	1749	84	20·82
KING WILLIAM'S TOWN "PURE" HIGH SCHOOLS	586	28	20·93
QUEENSTOWN "PURE" HIGH SCHOOLS	1343	69	19·46
TOTAL OF ABOVE "PURE" HIGH SCHOOLS	36433	1760	20·47
REMAINDER OF "PURE" HIGH SCHOOLS	12193	658	18·53
TOTAL OF ALL "PURE" HIGH SCHOOLS	48626	2438	19·94
REMAINDER OF ALL HIGH SCHOOLS	13917	959	14·51
TOTAL OF ALL HIGH SCHOOLS	62543	3397	18·41

There are certain restrictions imposed by examination regulations :-

(1) A pupil may not take more than four languages.

(2) A pupil taking Literature may take only three languages.

(3) A pupil taking Physical Science may not take either Physics or Chemistry.

(4) A pupil may not take more than three science subjects.

(5) Except in the schools mentioned in Chapter V, not more than two commercial subjects may be taken.

(6) Southern Sotho may not be taken with Tswana.

The thirty-six single-sex high schools are nearly all of a reasonable size. It is, therefore, many of the co-educational high schools which are small, and in these the difficulty of providing sufficient elective subjects is further complicated by the differing needs of the sexes, especially during standards IX and X. This often results in groups as small as five pupils taking a particular subject, and even with this uneconomic use of teachers, in the small schools there will not be a wide enough subject choice to allow for the development of individual potentialities.

This theme will have to be discussed in more detail in Chapter X.

CHAPTER VIII

The Need for Vocational and Vocationally-Directed Education and the Needs of Pupils.

8.1. Economic Change - its effect on Education

It has been pointed out in the early chapters of this thesis that industrial education was first introduced as a means of solving the poor white problem and that of unemployment. It was not, in the first place, demanded by rapidly developing industry. There was much abject poverty in the periods immediately before and after the Anglo-Boer War, and it is to be supposed that it was the cumulative effects of the following two World Wars which have led to the rapid development of South Africa as an industrial nation and to the present condition of economic prosperity.

Professor Frankel, in the South African Journal of Economics in 1944, wrote, "There is nothing automatic about the growth of the National Income. That growth depends on the success with which the particular community adapts itself to its internal and external

environment. Its National Income may, therefore, remain stationary or decline instead of increasing. To assume, because a certain rate of growth was achieved in the past that it will automatically occur again in the future, is unwarranted. A nation's activities depend on its national and other resources, its geographical position, the size, density, skill and intelligence of its population, the extent to which its working population is fully employed and on the relation of its whole economic structure to the changing structure of the world economy. Changes in the external economic environment may necessitate re-adjustments in the internal economic structure of the economy which may be extremely difficult to bring about and may involve a decline and not a rise in income standards". [1] *Before quoting some figures in the table on page 347 for the Gross Domestic Product to illustrate the rapid development of South Africa as an industrial nation, it is necessary to emphasise Professor Frankel's remarks about the skill and intelligence of the population because this has a direct bearing on education and hence on the contents of this chapter. If the items which go to make up the Gross Domestic Product are examined it will be seen that the skill and intelligence of the population do indeed play a vital role in the economic growth of a country.*

The Crowther Report says for Great Britain what has also to be said for South Africa. "This has a double implication: there should be more real resources available for education; and, since a high level of national productivity can only be sustained by brains and skill, the schools have a higher challenge to meet." [2] *This is one point; but there is another. There is a general tendency for children to stop longer at school - longer than the law compels them. This presents another challenge. If it is agreed that it is a good thing for pupils to remain at school until they have reached their own individual*

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1. *Frankel, S. Herbert and H. Herzfield, The South African Journal of Economics, "An analysis of the Growth of the National Income of the Union in the Period of Prosperity before the War". Vol.12, No.2, June 1944. p.112.*
2. *Report of the Central Advisory Council for Education - England. 15 to 18. Op cit. p.45.*

GROSS DOMESTIC PRODUCT (R MILLION)

YEAR	AGRICULTURE, FORESTRY, HUNTING AND FISHING	MINING AND QUARRYING	MANUFACTURING	WHOLESALE AND RETAIL TRADE	OTHER	TOTAL
1912	66·3	80·9	13·1	40·3	106·6	307·2
1920	122·1	94·8	40·6	86·2	201·4	545·1
1930	77·9	81·7	50·9	82·3	248·7	541·5
1940	119·9	185·0	121·9	136·5	413·0	976·3
1945	179·4	195·0	231·4	204·5	684·5	1491·8
1950	432·3	326·3	417·5	350·6	965·4	2492·1
1955	567·0	437·6	701·4	544·0	480·2	3727·2
1960	587·7	656·0	915·5	632·1	2021·3	4812·5
1961	634·4	685·2	983·1	649·7	2145·2	5087·6
1962	635·5	715·4	1087·5	713·8	2272·4	5424·6
1963	698·5	753·8	1240·3	826·9	2488·0	6007·5
1964	689·0	829·8	1411·5	919·0	2774·8	6624·1
1965	734·8	883·5	1617·1	999·7	2991·0	7226·1
1967	1045·0	1105·0	1887·0	1198·0	3797·0	9032·0
1968	*	*	*	*	*	10283·0

STATISTICS FROM "STATE OF SOUTH AFRICA", JOHANNESBURG, DA GAMA PUBLISHERS, P.250.

* SUB-TOTALS FOR 1968 NOT YET AVAILABLE

ceiling of academic achievement, it is vitally important that the education provided shall be of such great interest to them that the lure of high initial wages for unskilled work be not strong enough to cause them, in periods of despondency, to leave school and eventually be faced with the fact of frustration because of not having achieved what they might have.

For at least the last thirty years South Africans have been very qualification conscious. There was a time when certificates were issued for success in the standard V1 and V11 examinations, in the Junior Certificate examination, in the Intermediate examinations and in the standard X or Senior Certificate examination. There were certificates for proficiency in shorthand, typing and a host of other skills. These probably served a purpose. In many of the minor cases the external examinations have disappeared and with them the multitude of certificates. This is not to say, however, that the importance of being qualified has disappeared. It is quite otherwise. One of the impacts of technology has been to create jobs for which specialist skills are needed and for all of these some qualification is necessary. And even where no expertise is necessary, there is a demand for proof of good general education. The schools have, therefore, yet another challenge to meet.

This is not yet the end of the story. The impact of technology is felt in another way. The scientific revolution has not only created a greater need for scientists, technologists and technicians. It demands that no man (or woman) shall complete his education without being aware of the language or the philosophy of science. It is obvious that people need to be literate; it is perhaps not yet so obvious that they need to be numerate, that is to say, able to understand the basic nature and aims of science; and to quote the Crowther Report again, "To this proposition there is the natural corollary that greater efforts should also be made to see that the scientists and technicians should be exposed to the radiation of humane letters". [1]

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1. Ibid. p.51.

It is true that many of our children will not be scientists, technicians or artisans but it is equally true that every person should be able to make intelligent use of the products of technology. Somewhere must be found place to give children some mechanical knowledge and dexterity. Most of them will eventually drive cars, use vacuum cleaners, electric polishers and the great variety of mechanical contraptions which have made our daily lives more comfortable.

The greatest challenge to our educational system posed by the phenomenal growth of technology and of industry, however, is the urgent necessity to prepare our children for change. K.E. Anderson, Dean of the School of Education at the University of Kansas, wrote an article called "Educational Dimensions for the Coming Epoch". No note of the journal in which it was written has been kept but some notes from the article are available. He wrote, "Consider the background against which we see our educational tasks ..... . Often growth from zero to near-saturation point of production in an industry,covers a period of time smaller than that during which a youth is required to attend school. An individual of today emerges from school into a world whose technological development differs markedly from that of the world into which he was born." The key-word is adaptability - we must encourage our pupils to be adaptable to change. Their training, and in particular their mental attitude to work, will need to be very different from the attitudes which are largely prevalent today and which are based upon an industrial age when a man trained in a particular trade or skill could reasonably expect to practise it for a lifetime.

Michael Hutchinson and Christopher Young have these things to add, in general, about the task of a school: "Schools are faced with the immensely difficult task of handing on the ideas of the past, tempered by the experience of the present, to the men and women of the future. The effectiveness of education cannot, except in the most superficial sense, be reckoned by the numbers of children who pass a certain examination. A much fairer test would be to ask to what extent the

pupils of a school, when they reach in middle age positions of influence in the community, still retain receptiveness of mind and combine it with maturity of judgement. For schools are responsible for the intellectual inheritance of mankind. Apathy is the one inexcusable failure of a school. Probably it does not matter very much whether the ideas which are produced in a classroom gain an immediate and enthusiastic acceptance or arouse a vigorous if short-sighted opposition, but it is a serious matter if they provoke no more than passive resignation on the part of the pupil. For, once the mind has been aroused, the main part of the job has been done." [1]

It would appear then that the impact of economic prosperity upon the education system should be to cause the authorities to take another look at it. The Crowther Report sums up the reasons for this re-examination. "The task of education in a technological age is thus a double one. On the one hand, there is a duty to set young people on the road to acquiring the bewildering variety of qualifications they will need to earn their living. On the other hand, running through and across these vocational purposes, there is also a duty to remember those other objectives of any education, which have little or nothing to do with vocation, but are concerned with the development of human personality and with teaching the individual to see himself in due proportion to the world in which he has been set. ..... The primary concern of the schools should not be with the living they will earn but with the life they will lead." [2]

8.2. The Need for Vocational Education at Secondary Level.

There are a number of questions to be answered of which the first is to do with the need for vocational education and for vocationally-directed education. The question posed here is, of course, not whether there is any need for vocational education. The question would be absurd. Most university education, be it for the pulpit or for commerce,

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1. *Michael Hutchinson & Christopher Young. "Educating the Intelligent." Harmondsworth, Middlesex. Penguin Books. 1962. pp.31 and 32.*
2. *Report of the Central Advisory Council for Education - England. 15-18. Op cit. p.53.*

is vocational. The question is asked in relation to vocational or vocationally-directed education at secondary full-time level because that is the scope of this thesis.

There have been protagonists and antagonists of this form of secondary full-time education ever since it was introduced. The opponents hold that only a general or liberal education should be given to pupils up to the school leaving age. They feel that there is a real danger of producing "technical barbarians". No one would dispute the place of general education in any scheme of vocational education - it is of the greatest importance. Professor Whitehead had something to say in this regard. "The antithesis between a technical and a liberal education is fallacious. There can be no adequate technical education which is not liberal and no liberal education which is not technical ..... . There are three main methods which are required in a national system of education, namely, the literary curriculum, the scientific curriculum and the technical curriculum. But each of these curricula should include the other two. What I mean is, that every form of education should give the pupil a technique, a science, an assortment of general ideas and aesthetic appreciation and that each of these sides of his training should be illuminated by the others. Lack of time, even for the most favoured pupil, makes it impossible to develop fully each curriculum. Always there must be a dominant emphasis." [1]

The last sentence is of tremendous significance. Dewey supports this point of view when he says that education through occupations is conducive to learning. [2] *F.H. Spencer also agrees. "The mere fact that their training is directed to an occupation is in itself a valuable stimulus to that interested effort, which properly directed, is the sun and centre of all real education."* [3]

Professor Botha in his 1938 annual report, previously quoted,

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1. *A.N. Whitehead. "The Aims of Education and Other Essays." London. Williams and Norgate. 1947. p.74.*
2. *J. Dewey. "Democracy and Education." New York. The Macmillan Co., 1942. p.361.*
3. *F.H. Spencer. "The Technical Colleges of South Africa." New York. Carnegie Corporation, 1937. pp. 11 and 111.*

wrote "The objects which a country has in view when it establishes a system of vocational education are mainly three. It hopes to train workers to supply goods and services for its own internal purposes; it wishes to have skilled craftsmen and scientists who can start and maintain its industries on such a level that it can compete successfully with products from overseas; and realising that there are types of ability and character amongst its population that can best find themselves by means of the practical applications of scientific principles, it hastens to supply the appropriate practical training ..... the work of the Education Department is distinct from that of these various organisations in that it stresses broad principles, scientific background and cultural growth far more than any of the employer organisations that provide a more definitely ad hoc training." [1] Dr. Botha's third point is of importance in the present context - the types of ability and character that prefer the practical applications of scientific principles. He has the support of Dr. Spencer who wrote in the report quoted previously, "The truth is, that at the age of adolescence many boys and girls are immensely stimulated by the new interest which applied science and the handling of tools and materials provides." [2] Dewey's point of view is that education through occupations is "a foe to passive receptivity". [3]

The de Villiers Report quotes from the United States' Report of the Commission on Secondary Education which seems to put a point of view that is worth further consideration. "Consequently, education in a democracy, both within and without the school, should develop in each individual the knowledge, interests, ideals, habits and powers whereby he will find his place and use that place to shape both himself and society toward ever nobler ends." [4]

Franklin J. Keller sums up the aim of vocational education, and

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1. Union Department of Education. Report for 1938. Op cit. p.13.
2. F.H. Spencer. Op cit. pp. 11 and 111.
3. J.H. Dewey. Op cit. p.361.
4. Report of the Commission on Technical and Vocational Education. Op cit. p.23.

hence the necessity for it in an oft-quoted statement "Vocational education is not job training. It is not perfection of skills. It is not tricks of the trade. It is not haggling in the market place, wrangling in the law courts, breaking of soil or binding of wounds. It is all of these, but it is much more. It is creative spirit in the mechanic, service rendered by the merchant, justice won by the prosecutor, food raised by the farmer, and life saved by the doctor. It is attitudes, emotions, ethics, conduct, language and beauty - those attributes that transform jobs into vocations and men and women into their neighbours' keepers and into citizens of the world. It is to walk 'worthy of the vocation wherewith ye are called'." [1]

There can be little doubt that there is a demand for vocational education at both the secondary and the tertiary level. The next question to be answered is, of what type or types should it be? Are we proceeding now along the right path especially with regard to full-time secondary vocational education?

8.3. General Purpose of the Curriculum

The changing nature of industry has already been mentioned. It imposes rather different demands from those of even thirty years ago. The 1964 Quebec Commission Report describes the present position very well. "In the past, industrial production depended on manual labour. The huge, anonymous crowd of slaves, serfs, craftsmen, "hands" in the early "manufacturies", needed little more than physical strength or dexterity to do their work. Then gradually, in almost all fields of production, technological progress has required workers to have an increasing amount of intellectual knowledge. Of course, technology has not done away with the assembly line or eliminated routine production methods, which require minimal thought on the worker's part, but the manual labour of an earlier day tends to become technical labour,

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1. Franklin J. Keller. "Principles of Vocational Education." Boston, D.C. Heath & Co. 1948. p.4.

demanding precise and detailed information. Side by side with the domain of the humanist and the man of science there has developed the domain of the technician. Here is the world of applied science, of precision in detail, of concern for efficiency, of mechanical or automotive perfection, a world often notable for that intellectual curiosity and inventive ingenuity which are its daily bread. Heir to the tradition of craftsmanship, it has inherited their fine qualities and also, occasionally their limitations. In the past, technical knowledge was handed down from father to son, or else acquired through apprenticeship; today it is imparted in the classroom." [1]

The point this Commission was making is that there are a number of types of workers required - the unskilled production line worker, the skilled operator, the artisan, the technician and the engineer - if we look only at this side of industry. There will be similar degrees of intelligence required in the commercial side and in the administrative side of industry. In a prosperous economy like that which is at present our good fortune in South Africa, there is a place for just about everybody, but training is required and at a number of levels. The real bone of contention is, at what educational level should each type of training begin? Has the special secondary school a real role to play? Should technical training begin in a technical high school in standard Vl ? Is standard Vlll a little late to begin intensive commercial training in a commercial high school? Is the curriculum at present prescribed in agricultural high schools sufficiently vocational? These are the type of questions that are being asked, and, since the re-transfer of all vocational education at full-time secondary level to the Provincial Administrations, more earnestly engaging the serious thought of educationalists at all levels in attempts to find the correct answers.

The National Advisory Education Council established by Act No. 86 of 1962, appointed a sub-committee, first under the chairmanship of

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1. *Report of Royal Commission of Inquiry on Education - Quebec. Op cit. p.7.*

Mr. Stanley Osler and later under the chairmanship of Mr. L.J.T. Biebuyck, the former Director of Education for Natal, in September 1964, to inquire into the question of vocationally-directed and vocational education, instruction and training for boys at school up to standard X level. This has been referred to in Chapter 1 when the definitions of vocational education were given, together with other significant remarks from the report. It offers also a definition of vocationally-directed education which is likely to find much acceptance: "Education designed to be both formative in terms of personal development and functional in terms of the vocational needs of the individual and the economic needs of the community". Here in a few words the committee named the three cardinal points of a properly conceived vocational, or vocationally-directed, educational programme, namely,

(i) personal development;

(ii) individual vocational need;

(iii) vocational needs of society.

It is, of course, conceded by most thinking people today that the personal development of a pupil is a fundamental requirement of all educational programmes, academic or otherwise. Differences of opinion occur when it is said that it can occur through vocational or vocationally-directed education. Some people argue that the content of the curriculum is not as important as the methods employed by teachers and that, therefore, irrespective of the subjects taught, a vocational school can ensure the personal development of a pupil as well as any other. This does not, according to the lessons learnt from history, appear to be a valid argument. This is the theory that educationalists in this age are trying to disprove. It is based on the theory of the 'transfer of training' which used such terms as 'mental discipline and formal training' and believed that intelligence could be trained by some formal academic curriculum heavily loaded with classical studies and then applied to almost any other field of study. The public schools of England insisted on the study of Latin and Greek originally because style and elegance was sought. When this point of view changed it was a training in accuracy and precision that justified the inclusion of

these subjects. Of course, the public schools provided the rulers and administrators of a rapidly expanding Empire and, writes Geoffrey Bantock " ... it was also fortunate that the classics provided a political literature and one, therefore, at least relevant to the demands of Empire." [1] The fact that this type of training was not always adequate is amply illustrated for South Africans by the example of Lord Milner, one of the most intelligent men of his generation, who "was called upon to tackle the problem of the unification of South Africa after receiving a higher education largely devoted to the writing of classical verses. Today we have reason to wish that he might have been somewhat better prepared". [2]

Hutchinson and Young, quoting from the Spens Report "Secondary Education with Special Reference to Grammar Schools and Technical High Schools" - a report published by H.M.S.O. in 1938 - wrote "Improvement in any single mental function rarely brings about equal improvement in any other function, no matter how similar, for the working of every mental function-group is conditioned by the nature of the data in each particular case." [3]

"Research has shown clearly that 'transfer of training' does not take place to anything like the extent that it was believed to in the nineteenth century." [4] This is supported by educationists like R. Freeman Butts, Professor of Education, Teachers College, Columbia University, [5] and William Boyd, Reader Emeritus in Education, University of Glasgow. [6]

If it is accepted that, "There is in fact little automatic 'transfer of training' even amongst the ablest pupils and probably none at all amongst the less intelligent ones", [7] the content of the curriculum becomes of the greatest importance. There must be balance to ensure that, as far as possible, for every individual pupil, all

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1. G.H. Bantock. "Education in an Industrial Society." London. Faber & Faber. 1963. p.66.
2. "Educating the Intelligent" Op cit. p.35.
3. Ibid. p.35.
4. Ibid. p.35.
5. R. Freeman Butts. "A Cultural History of Education." New York. McGraw-Hill Book Co. 1947. 1st.Edition. 4th. Impression. pp.603-610.
6. William Boyd. "The History of Western Education." London. Adam & Charles Black. Ninth Edition. 1968. pp. 412-441
7. "Educating the Intelligent." Op cit. p.35.

the vital mental abilities and moral qualities are developed.

If it is also agreed that the mere acquisition of factual knowledge is not the basic purpose of training, then, too, there must be an effort made to relate, one to another, the subjects in any curriculum.

There are, therefore, two facets to the educational programme that are of fundamental importance - the subjects in the curriculum and how they are taught. The cry today amongst educationalists is for "insight" on the part of the pupils.

8.4. Development of Personality

How, then, does this apply to the development of personality of a pupil, which is the first point made by the Biebuyck definition? It will be readily conceded that intellectual training is only a part of the preparation of the mature adult. There must be moral purpose as well and this means that during adolescence, pupils must be confronted with such problems as "what constitutes good and bad conduct", "how do we distinguish between right and wrong" and "how do we decide between the calls of duty and of pleasure". Sir Richard Livingstone, President of Corpus Christi College and Vice-Chancellor of the University of Oxford, had much to say about this. "Most proposals for 'the reform of the curriculum' aim at making the patient at home in the mechanisation of civilisation and adept in its techniques. In this vast frame the microscopic speck of spirit for which the frame exists is unnoticed and neglected. Yet an age rich in material resources is one where human beings most need strengthening in spiritual insight and self-control so that they can dominate the forces which they have created and say to them in the words of the Stoic 'I am your master, you are not mine' " [1] *And discussing in another place the content of a good education, he wrote : " ... these subjects should bring the pupil face to face with something great. Nothing - not all the knowledge in the world - educates like the vision of greatness and nothing can take its place. ..... Education without this, whatever else it contains, remains poor and incomplete".* [2]

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1. *Sir Richard Livingstone. "Some Tasks for Education." Oxford. The University Press. 1946. p.30.*
2. *Ibid. p.17.*

A curriculum must be specifically designed to bring the problems of adolescence before the pupil. It is indeed "poor and incomplete" without this. Within the classroom it is the humanities which provide the clearest guide to these problems. We provide today a study of religion, literature and history, to some extent, in all schools. How they are taught and the kind of syllabuses prescribed form another aspect of the question altogether. For as M.L. Jacks, Director of the Department of Education of Oxford University, writes, "All children (except a small percentage who are ineducable) are intelligent but in many different ways" and he goes on to point out that the differences are primarily in "kinds" of intelligence and secondarily in degrees of intelligence. He gives examples - the child who observes intelligently, another who reasons intelligently, another who uses tools intelligently, another who reads intelligently and another who talks intelligently - and then concludes that we have to practise "the tolerance that will permit clever boys to be clever in their own way". [1] *There must be sufficient differentiation to cater for at least, the main types of intelligence, but with the main purposes in mind. Initiative must be encouraged and for some groups this will mean some project work because this encourages concentration to gain a feeling of expertise which brings with it a sense of confidence and critical evaluation of their own work. But there is more to it than this. There is the supremely important question of communication. Most provincial education departments have, at long last, done away with the external examinations except for the school-leaving examination at standard X level. This should provide the opportunity for developing some of the communication skills that have not received sufficient attention in the past. One of these is the art of oral communication. Effective speaking is one of the most valuable arts that a school can develop in its pupils. It could be encouraged much more than it is at the present time if less written work and more discussion work were undertaken, especially in the subjects*

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1. M.L. Jacks. "The Education of Good Men." London. Victor Gollancz Ltd. 1956. pp. 53-55.

mentioned as of primary importance for the development of personality. This is not to say that discussion should not take place in other subjects. In some vocational subjects, for example, the trade theory of any trade, it is a most valuable method of teaching and encourages pupils, once they have overcome shyness, to take a more active part in lessons and know that they are contributing to the successful unfolding of the lesson.

And closely allied to the power of speech is the ability to listen skilfully. Stanley Nisbet, Professor of Education in the University of Glasgow, writes, "Oral communication involves the most basic of the basic skills necessary for living in society. Speaking and listening, though not included in the three R's, are far more important than any of them, and a school which fails to teach its pupils to speak easily and effectively and to listen intelligently is guilty of a gross dereliction of duty. There are far more occasions in life when it is necessary to speak and listen well than there are when it is necessary to read and write well." [1] These arts must be developed at all ability levels - it is as important for the girl from the special secondary school who becomes a hairdresser as it is for the future teacher, lecturer, lawyer or politician. It is, of course, a question of degree.

Reading and writing remain basic skills of very great importance. Here again there can be differentiation, particularly with regard to writing. A technician needs to be able to read and digest an assignment and to carry out the instructions. He needs, too, to prepare concise and accurate reports on assignments completed. To a greater or lesser degree, this is true in most situations.

The art of communication is not only essential as a vocational tool; it is not only a means of personality development; but it has another social value in democratic society because in such a society the will of the people must be communicated to the government, and this is everybody's privilege and duty.

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1. Stanley Nisbet. "Purpose in the Curriculum." London. The University of London Press Ltd. 1957. p.57.

The conclusion to be reached, apparently, is that all forms of education, be they vocational, vocationally-directed or academic, must include the humanities, to some degree, in the curriculum. To omit them, or to give them insufficient place, will deny, to an unpredictable extent, but to an unforgivable one, the duty of a school to perform one of its major tasks, the development of the personality of its individual pupils. It must, however, be stressed that merely to include these subjects is not enough. The importance of discussion as a tool in the method of a teacher has been mentioned, but there is more to it than that, and what is now to be written applies not only to the official languages, history, religious instruction and the other subjects usually grouped under the 'cultural' subjects or humanities. It applies to all subjects and has a major contribution to make to personality development and, ipso facto, to the other two points required by the Biebuyck Committee's programme.

Possibly the primary task of the schoolmaster is not to increase intelligence, which may well be a constant factor, but to train it and to train the user in the best possible use of his intellectual endowment. This usage aspect is the important one because trained intelligence must be applied to the right objects. In the normal course of a school life a pupil will be taught to apply himself to certain obvious tasks, particularly if they are set in subjects in which he is interested, but far too often the affective part of the learning process is neglected and pupils are not taught to apply their thinking capacities to the abstract values like truth, beauty and goodness. These are not only met with in literature and religious studies but also in art and in music and, for that matter, in just about every subject which a child is likely to study. Their application to problems of human conduct are of first importance and it is not the task of the teacher to convey conventional opinions about these but to create the opportunities which will cause the pupils to think out some of the problems for themselves. Acceptance is not enough. There is possibly a greater

need in a technological age to think about religious beliefs and heresies, about such problems as that of pain, agnosticism, Marxism and the host of others which readily suggest themselves. The teacher's job is to guide individual thinking to become honest and catholic, spontaneous and free. His job is to see that pupils take nothing on trust but are critical of every statement of fact and every expression of opinion. This is the task of every teacher and it is possible in every subject and in very nearly every lesson. As Jacks writes, it is better for a pupil to come to a wrong conclusion, a conclusion that he may have to modify or even abandon, than not to reach one at all. It is the only way to become an effective person. [1]

And while Jacks' opinions on thinking are being discussed, it will be as well to mention one or two other ideas he has in what he describes as the "making of good men" which is tantamount to the present discussion of personality development. A good man, he says, must be a good worker. As well as no shoddy thinking there must be no shoddy work. [2] This is important in all subjects but quite inescapable in vocational subjects. It is as important in the housecraft high school as it is in the typewriting room of the commercial high school, the sheetmetal workshop of the special secondary school, the motor mechanics shop of the technical high school and the dairy of the agricultural high school. Livingstone deals with the same point when he mentions that there are four fields in which excellence is the concern of everyone. As his first point he writes, " ... a man should know the highest standards and the best methods in his own job, so that he may do it as well as he can: professional pride, a sense of craftsmanship are acknowledged virtues". [3] Efficiency is necessary in knowing, but is particularly necessary in the practical affairs of life. This means, for the teacher, that pupils must be encouraged, nay, made to do their best. Jacks

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1. "The Education of Good Men." Op cit. p.16.
2. Ibid. p.16.
3. "Some Tasks for Education." Op cit. p.48.

continues his argument by saying that four things are necessary in contemporary society:-

(i) a respect for good work;

(ii) a willingness to work hard:

(iii) efficiency;

(iv) service to society by daily work well done.

Teachers, he says, must recognise the urgency of this and set themselves to instil these ideas. [1]

It seems, therefore, that the school has a task which may be regarded as three-fold in the development of the personalities of its pupils:-

(a) to discover the kinds and degrees of intelligence which the pupils possess;

(b) to develop or train this intelligence;

(c) to direct the pupil into a correct choice of subjects.

(b) and (c) are interwoven.

Most teachers, it is to be regretted, pay only lip-service to the axiom that it is their duty to do these things. It is more honoured in the breach than in the observance and it may well be that, in the training of teachers themselves, we do not first train them as persons. This, at any rate, is the theme of Peter Gurrey's book "Education and the Training of Teachers", which is outside the scope of this present thesis.

Personal development, or the development of personality, or personal growth are all terms used indiscriminately in this first part of the Biebuyck Committee's programme. Intellectual development, about which the previous pages have been written, is not the only component of personal growth. It is an important one, and no reputable educationist would seek to minimise the importance of academic studies. In fact, the committee reported, "The Committee feels strongly that vocational

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1. "The Education of Good Men." Op cit. p. 18.

education should be directed not only towards occupational competency but also towards cultural development and good citizenship. Whatever course of subjects is decided upon, provision must be made for general formative education. Any course necessarily includes the two official languages, but over and above that the most machine-minded apprentice should learn to appreciate good literature, art and music, and the most artistically and academically minded pupil should have knowledge of and respect for the practical subjects. It may never be forgotten that we are training our pupils for both work and leisure." [1] *This is true. Aesthetic development is a part of personal growth and, in modern times certainly, it has been found that the great majority of men, women and children appreciate beauty and try to create it. Place is given in the primary school curriculum to some forms of individual expression - music, crafts, painting, modelling, drama, but in the secondary curriculum there is one period per week given to music and, unless specialisation occurs, no more to the deliberately aesthetic subjects. At least in the junior secondary course, place should be found for such a subject, preferably as an elective subject. To force all children, especially boys in the adolescent stage, to take part in "class music", which quite often takes the form of learning and singing songs, is possibly a misuse of an opportunity for providing alternative aesthetic activities.*

Personal development involves, too, physical development, and this is usually well-catered for in schools. It is, of course, of tremendous importance, because positive health is not only a personal concern affecting mind as well as body, but it is a social concern as well.

Social development is also involved. Psychological research has revealed that our happiness and full maturity depends upon successful relationships with other human beings. Much attention is given to this in industry today. The industrial psychologists spend much time trying to improve personal relationships. It is not just a question of "fitting in" but of enjoying the company of other people. The school

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1. Biebuyck Report. Op cit. p. 22. para. 12.6.1.

is a microcosm of the world and it is the place to begin this extremely important part of training. It is probably not a question of formal training, in fact it is almost certainly not; but it does involve adequate training of teachers who are prepared to make the school community a real and happy community and not a heterogeneous collection of individual human beings. The atmosphere must be one of friendly co-operation. The tone of the school must be good. These things can be helped, too, by sufficient social functions and adequate attention being paid to the pupils who are not good "mixers".

Another means of social education has been mentioned earlier when discussion methods were dealt with. The use of project methods XX *occasionally, particularly group projects, is of tremendous value when free mixing and informal grouping is permitted, and the staff members are friendly and encourage pupils to come and ask for help and advice.*

In most places in South Africa schools close between 2p.m. and 3p.m. Some of the time after school is taken up in boys' schools by cadet training and in most schools of secondary standard there are sports activities. But by no means all girls and boys take part in sport. Here then is a chance for further social education, by encouraging all pupils to take part in some school society or another or in some other extra-mural activity like the production of the school magazine. Anything which helps a child to lose self-interest and contribute to a co-operative interest is a valuable part of social development.

There is one other component of personal growth which is important enough to require separate mention. It is spiritual development. Amongst the White population of South Africa this refers in the vast majority of cases to spiritual development in the Christian religion. In schools two periods per week are given to what used to be called Religious Instruction and is now being called by other names like Biblical Knowledge. The syllabuses prescribed, which differ for Afrikaans and English speaking pupils, are approved by the respective Churches. In practice, however, there are many occasions when the periods devoted to this subject become little more than reading lessons, and one has serious doubts as to the efficacy of such lessons. There is a general

reluctance, at least in the Cape Education Department, to appoint specialist teachers for this subject, but where the subject is of such vital importance, surely only the specially trained teacher, who feels a genuine desire to teach this subject, should be allowed to handle it? Adolescents are, in the nature of things, in a period of stress - physical, mental and spiritual - and with so much being done at the moment to cater for the first two conditions, it is fundamentally wrong to pay only lip service to the last.

Under the heading of personal development, then, consideration has been given to intellectual development, to the powers of communication, to the problem of producing good and honest workers, to aesthetic development, physical culture, social development and spiritual development. Much of this is included in affective learning - one of the blind spots in all education. With the re-planning of curricula and the proposed introduction of more differentiation into schools, it is to be hoped that place will be found for these aspects of affective learning which are so much part of personal growth; but from some recent work in translating an extremely good teachers' guide for Physics and Chemistry from Afrikaans into English, and noting the contents of this, it is to be feared that if all the new syllabuses are as long and involved as this one, then the time given to formal studies is going to be such as to leave little over for the informal, non-examination studies from which so much good can come.

8.5. Individual Vocational Need

8.5.1. General

Most pupils when they leave school, have to earn a living. At some stage or another people have to become economically self-supporting. Those who fail to achieve some desired standard of financial independence are frustrated. Most men expect to marry and to raise a family. This is in the nature of man but it presents an economic problem. It can be reasonably assumed, then, that the most obvious reason, though not necessarily the most fundamental one, for education, is to prepare pupils for a vocation.

There is, however, a compelling psychological reason. It is the feeling of "belonging". To be a wage-earner gives a person a place in a community from which he has a reasonable right to have an opinion and the right to expect to be allowed to express it. It gives a feeling of independence which is necessary to any human being who is to develop to maturity.

These are the two basic aspects of the vocational needs of a pupil. There is another consideration. The career which a pupil chooses must be satisfying. Important though an adequate wage may be, it never compensates for work which is distasteful, unsatisfying or insufficiently demanding.

It is one of the tasks of education to prepare a pupil for an occupation. Involved is not only the necessary pre-vocational training in the skills required. First there must be an accurate assessment of aptitudes and abilities. This is a most important part of the job of a school. Throughout school life children are, or should be, observed while they are studying a wide range of subjects involving a number of disciplines. They should also be observed taking part in a number of extra-mural activities.

There is much activity today in providing guidance for pupils. Teacher-psychologists are being appointed, in the first place to the larger high schools, and about two-thirds of their work will be in connection with giving guidance, vocational and general, to pupils. In standards V1 - V111 this will take the form of group guidance for the most part, although obviously some individual guidance will be given as required. In standard 1X and X the guidance will be individual. This undoubtedly is a step in the right direction. The difficulties at the moment are in finding the number of teacher-psychologists necessary to supply even one to each large high school because it is obviously not enough just to be a trained teacher with psychology as a major subject in the degree. These men and women will have to be given sufficient opportunity to study the needs of the country, especially in industry and commerce, and become so well acquainted with them as to be able to give sound advice to the very many pupils who are going

to pass through their hands. They will have to be aware of the financial help that may be obtained for those capable of receiving tertiary education and desiring it. This will be a demanding job - so demanding in fact that the observation of pupils mentioned at the beginning of this paragraph will have to be undertaken by ordinary teachers. In a later chapter on the concept of comprehensive schools this system will be referred to again, but it is surely vitally necessary that when pupils enter a high school they should be assigned to a form teacher or tutor, call him what you will, who will follow the pupils' progress through their school life and be able to assist the teacher-psychologist with progress reports, sports records, extra-curricula. interest reports and such other general information as may be required. Only then will it be possible to make comprehensive assessments of aptitudes and abilities. This task is possibly more important in the academic type of school than in the vocational school because, as things are at the present time, no attempt is made, especially in the case of the top thirty to forty percent of pupils, to give vocational training in the academic school. This position may soon alter if differentiation and vocationally-directed education are introduced in the way likely to be proposed, but it is very likely that the cream of the school population will still choose a strongly academic curriculum rather than one containing vocational subjects of no immediate importance to them.

However, we have a large percentage of pupils, possibly sixty per cent, who will need vocational guidance and we must try and ensure that their choice of a career is going to provide them with opportunities to develop their talents, make their best contribution to their community and be right for their future happiness.

Place should be found in the curriculum of school-leavers for some study of the economics of daily life. This may fall under the heading "guidance". Possibly it does; but the problem is complicated because we have, generally speaking, two streams of school-leavers, the standard VIII and the standard X streams. Future differentiation

of curricula may take care of this, but it is not the intention, as has been mentioned, to give group guidance to standard IX and X pupils. To give a course of "everyday life economics" to such pupils when they are in standard VIII may be a little too soon, especially as some of their problems may be different from the pupils who leave in standard VIII and may have to learn to live on lower incomes. This problem will have to be solved. The general problem is this. A child leaves school and becomes a wage-earner. Before many years he becomes a husband and a father. He and his wife will need to know how to budget, how to buy a house, when they can afford to own a car. They will need to know the cost of having and bringing up children. It is, of course, the case that much is learned by trial and error, but the future happiness of married life hinges so much on the ability to manage the economics of daily living, that time spent at school on this subject cannot be regarded as wasted.

8.5.2. Specific

8.5.2 (a) Introduction. It is not proposed to discuss here the training to be given in schools for professional occupations. The Joint Matriculation Board prescribes the general conditions for entrance to a university and the university faculties lay down their own specific requirements. The professional institutions, also, prescribe their demands, and the high schools are, in most cases, equipped to meet the needs. There may well be some re-thinking in some quarters about prescribed conditions but these are likely to be in favour of pupils rather than more restrictive and, in any case, will almost certainly be based on a sound, general, formative education. Indeed all education, academic, vocationally-directed or vocational, should be so based. To quote again from the Biebuyck Report, "Indications are that the greatest expansion of all is likely to take place in some of the more highly skilled occupations and it is obvious that people who have a good general educational background and are skilled, or pupils with a potential in both directions, are the best placed for moving into these occupations." [1] This is generally agreed but we have to note that in

1. Biebuyck Report. Op cit. p.5.

South Africa we have a limited supply of White labour and the education of the White people will have to concern itself with the lower intelligence as much as it does with the higher intelligence groups.

The future of the Republic depends largely on the supply of skilled labour. This must affect the education given in schools because the national education system must provide the foundation for producing the manpower. The importance of personality - the sense of responsibility and the pride of workmanship has already been stressed. The question which has now to be faced is, at what stages should general education be supplemented by vocationally-directed and/or vocational education? This will be determined, so far as the pupil is concerned, by interest, aptitude and ability. National demand will also have to be taken into account.

8.5.2(b). Definitions What is the skilled labour that is required in industry? The standard definitions are given here.

"A technologist has the qualifications and experience required for membership of a professional institution. Most technologists are university graduates in engineering and other applied sciences but there is a good proportion of holders of Higher National Diplomas or Certificates or similar qualifications who become technologists.

A technologist has studied the fundamental principles of his chosen technology and should be able to use his knowledge and experience to initiate practical developments. He is expected to accept a high degree of responsibility and in many cases to push forward the boundaries of knowledge in his own particular field." [1]

It should be noted here that the remarks about holders of "Higher National Diplomas ..... technologists" no longer hold and a more modern definition would leave out these qualifications. To become a member of a professional engineering institute today, requires a university degree qualification plus some responsible experience.

In this connection there is one further point to note. The

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1. Great Britain. Command 9703. "Technical Education" London. H.M.S.O. 1956. p. 2.

Straszacker Report includes these words. "The comparatively small group of children, whose interests and talents are almost exclusively scientific and technical and to whom a balanced curriculum would prove a stumbling block, tend to go to Technical High School. At present, they can obtain the necessary Matriculation exemption certificate and proceed to engineering study at university and they should continue to be able to do so. This route is not recommended for the majority of intending engineers." [1]

In point of fact the number of boys in the Republic who obtain matriculation exemption via a technical high school is quite small. In 1965 it was 176, in 1966, 160 and in 1967, 124. The percentages of the candidates writing the standard X examination that these numbers represent are respectively 23.9, 20.8 and 14.4. The number who proceed directly to university is not known but personal experience with these boys suggests that it is very small, possibly not 1% of the candidates, that is to say, for the years given, 7, 8 and 9 students respectively.

"A technician is qualified by specialist technical education and practical training to work under the general direction of a technologist. Consequently, he will require a good knowledge of mathematics and science related to his own speciality. Examples of technicians in the factory are assistant designers and junior ranks of management on the shop floor." [2]

This is the type of work that boys who complete the M or T streams at a technical high school are well fitted to follow, as well as senior certificated boys from academic schools who have had some manual training, provided they are prepared to work hard for another four years on a sandwich basis - six months in the works and six months at a college for advanced technical education. "As many as five or six technicians may be required to every technologist." [3]

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1. *Republic of South Africa. Department of Higher Education. Commission of Enquiry into the Method of Training for University Degrees in Engineering. Part 111. R.P. 74/1968. p.12.*
2. *White Paper. "Technical Education" Op cit. p.2.*
3. *Ibid. p.19.*

"Craftsmen represent the skilled labour of the manufacturing industry and account for more than one-third of its manpower. With the growing complexity of machines and the introduction of new materials it becomes all the more necessary for them to appreciate not only the how but also the why of the work they do." [1]

In the complexity of today's industrial undertakings, craftsmen should be divided into a number of categories - it often happens of its own accord, in any case. It is necessary to have inspectors, foremen and chargehands, each, in descending order of the statement, responsible for certain sections of work. A case could also be made out for grading those artisans who do not, or have not yet, qualified for promotion, according to the degree of skill required in the pursuit of their trade. Some countries, Holland for example, do this. The artisans who reach the senior ranks will usually come from those who pass the T stream or the school-leaving stream, without Matriculation exemption, and fail to make the technician grade. Some of the other craftsmen (or artisans) will come from special secondary schools, or, in the majority of cases from the pupils who leave school at standard VIII level.

"Every technologist relies on technicians and craftsmen to translate his plans into products. It would be a great mistake to increase the output of technologists without adequately supporting them at the lower levels from which in any event many of them are drawn. Much therefore depends on strengthening the base of the pyramid of technical education by improving the education in the schools and raising the number of school leavers who are able and willing to take successfully the courses offered at the technical colleges." [2]

"The Operative is a man who after a period of trainiy which may vary from a few weeks full-time or part-time up to two or three years part-time, is capable of carrying out specific operations involving the

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1. *Ibid. p. 2.*
2. *Ibid. p. 4.*

use of machinery and plant which do not call for traditional craft skills. As the latter become more highly developed and specialised, there is the greater need for a generalised basic training which will enable the operative to become quickly familiar with changing methods and techniques." [1]

"In some industries where craftsmen have no specific place, e.g. the chemical industry, the operative works under the supervision of a technologist or technician, or may attain junior supervisory status." [2]

Generally speaking, the operative would come from those pupils who leave school at the standard V111, or lower level, and cannot secure an apprenticeship because of their inability to follow the theoretical training which is part of, and an increasingly important part of, apprenticeship training. There is an increasing need for these operatives (Iscor uses very many of them) and they can earn good wages. The type of training they receive at school is very important because, while realising that they are not intellectually endowed for different work, they must realise that they are an indispensable link in the economy of the country.

8.5.2(c) <u>The Technician</u>. These then are the types of job to be filled in many industries. As has been suggested, we need not give any attention here to the technologist, who is the product of tertiary education of university level. The position of technician is new in South Africa, technician training having started only in 1957 and then only in a small way. The standard of the training falls a little short of university level, more perhaps in the breadth of training than in the depth; in fact there are many who feel that the present standards required in the four-year technician courses are too high. This is not a matter which concerns this thesis. What does concern it, though, is the type of high school training required for it. The entrance qualifications are a senior certificate pass in at least mathematics and a science subject. This accords with a recommendation of the

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1. *Report of the Central Advisory Council for Education - England. 15 to 18. Op cit. p.328.*
2. *Ibid. p.328.*

Straszacker Commission which reads, "In order to obtain the necessary balance and to prevent over-specialization at school, it is recommended that Science and Mathematics should occupy about one third of the school time-table of future engineers. The humanities and social sciences should occupy the rest of the time-table.

A six-subject curriculum should therefore include Mathematics and General Science - comprising physics, chemistry and biology, in the proportion 3:2:1. If an additional science subject is taken it should be taken as a seventh subject." [1] *This statement is equally true when applied to technicians. In the first two years of an engineering technician's course a reasonably general course is followed - English, Afrikaans, mathematics, engineering drawing, physics, chemistry, electrotechnology, workshop technology and applied mechanics. Specialisation starts in the third year and continues in the fourth year. We see, therefore, that apart from the two languages, general education is absent and the curriculum is science-based.*

There are other technician courses offered, for example, for laboratory technicians, post-office technicians, technicians for the South African Broadcasting Corporation, medical technology, radiography, the chemical industry, for civil engineering, for the airways, the electronics industry, the plastics industry, the paint factories and for the sugar industry, and many more. The point is that, in view of the specialisation that has to be introduced in the last two years of these courses, the school course should be as general and formative as possible for as long as possible. This is not just a matter of the subjects taught, important though this aspect is; it is a question of approach and method. This is particularly true in science and mathematics where the emphasis must be on insight. To quote the Straszacker Report again, "The Commission recommends strongly, that the content of the science courses at school should not be made so full as to inhibit laboratory work and exercises which will develop inductive

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1. *Commission of Enquiry into the Method of Training for University Degrees in Engineering. Part 111. p.12.*

reasoning. In this connection it is essential that school laboratories be properly equipped for as many experiments as possible to be performed by the pupils themselves, and that worn out and obsolescent apparatus be replaced ..... . Some means will have to be developed to ensure that time intended for laboratory work and exercise in inductive reasoning is used for these purposes and not for drill or repetition." [1]

There is, of course, a strong move towards making the high school course a six-year course - a junior secondary course lasting for three years and starting in standard V, and a senior secondary course of three years starting in standard VIII. This might well furnish the opportunity for a sound general, formative education in the junior course, continuing in the senior course but becoming more specialised particularly in the last two years as the abilities and aptitudes of the pupils become more apparent.

The handicraft syllabuses for the academic schools have recently been revised and modernised. This was necessary; but to make the teaching in the metalwork room effective, attention will have to be given to the provision of up-to-date machine tools, even though these be not of industrial capacity, so that pupils in the senior course who intend to become engineering technicians become familiar with the principles and uses of these machines, and also so that unnecessary repetition of manual processes be eliminated to provide time for a deeper study of workshop technology.

8.5.2.(d) Commerce *Only the technicians' courses have been considered so far, the recruits for these coming not only from technical high schools but from the academic schools which will have given a mathematics-science bias to the curriculum in the senior secondary course and provided some manual training. There is the commercial side to consider because, going hand in hand with developing industry, is the increasing demand for recruits for the world of commerce. Again we take little note of those boys and girls who proceed to tertiary education at a university. There are many who leave school at standard X level and*

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1. Ibid. p. 12.

fill positions in commercial firms as typists, shorthand typists, general clerks and mechanised bookkeepers, and take up positions in the banks, building societies and insurance companies, to name but a few. Not all attain to matriculation exemption level. In commercial high schools the position with boys in recent years in the Republic has been. [1]

Year	Std. V111	Std. 1X	Std. X
1963	415	528	392
1964	421	478	391
1965	521	627	460
1966	479	557	442
1967	570	609	417

There are a number of points to note. We have seen in an earlier chapter that these schools start at standard V111 level. Now it is seen that the largest group is in standard 1X but that there are few drop-outs. But it should also be noted that in the country as a whole only about 15% of the pupils in commercial high schools are boys, though in the Cape Province this figure is almost 19% for 1969. (See table in Chapter 1V.) The percentage who actually matriculate is not known but the reason for it is well-known. Many commercial high schools do not offer mathematics as a subject because of the small demand for it. It is, unfortunately for the boys, an unpopular subject with girls, and with the present system of separate commercial high schools, it is possible only in a few of the largest of them to run an economically-sized mathematics class in the three standards V111, 1X and X. For those boys who do not wish to matriculate, the disadvantage of not having mathematics is, to some extent, offset by the three-year course in Accountancy. Nevertheless, not only are they barred from proceeding to a university, they are also prohibited from taking the C.A. qualification. This is one of the disadvantages of the present position which will need further discussion in another chapter. Naturally the girls who wish to follow these tertiary education courses are at the same disadvantage, but quoting from another report of the National

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1. Biebuyck Report. p.8.

Advisory Education Council in connection with commercial high schools. "These schools serve a very useful purpose. ..... . A high percentage reach standard X and find situations at good salaries with ease. The demand for these pupils is increasing." [1] Although the courses, as discussed in Chapter IV have a strong vocational bias, there is a core of general formative subjects and the course is a senior secondary course.

As far as the positions to be filled are concerned, some have been mentioned but there are opportunities in comparatively new directions like Electronic Data Processing, Organisation and Method Study, Public Relations and Marketing which standard X pupils who are prepared to study at colleges for advanced technical education can aspire to.

8.5.2(e) Apprentices The position as far as housecraft high schools is concerned has been discussed in Chapter III. It is when we come to the pupils who leave school at standard eight, nine or ten level without having acquired the qualifications to aspire to the positions mentioned above, that some serious re-thinking of courses and syllabuses has to be done. This applies not only to boys but to girls who propose to enter industry as apprentices and operatives.

There is no doubt that syllabuses at secondary level are at present all directed towards attaining a standard X leaving certificate, with matriculation exemption wherever possible. The Steyn report gives the following figures for 1965. [2]

		Total Enrolment	Std. VI	Std. VII	Std. VIII	Std. IX	Std. X
Housecraft High Schools		1 186	303	364	300	130	89
Technical High Schools		12 623	3 128	4 183	3 535	1 221	556
Commercial High Schools	Girls	8 136	-	-	3 130	2 893	2 112
	Boys	1 237	-	-	395	470	372

Considering first the housecraft schools, there is a drop of 170 in enrolment from standard VIII to standard IX which, based on the

1. Nasionale Adviserende Onderwysraad. Verslag van die komitee vir Beroepsgerigte Onderwys van die Meisie tot en met standard X en/of Matrikulasie. p. 158.
2. Ibid. p. 97.

standard VIII enrolment is 56.67%. From standard IX to standard X it is 31.5%. The girls leaving at standard IX may have the intermediate housemothers' certificate and probably find some kind of employment but there is nothing much offering for the 56.67% of the girls who leave after standard VIII at the age of 16+.

The same sort of pattern is followed in the technical high schools. The difference between the standard VIII and standard IX enrolment is 2 314 and this as a percentage of the standard VIII enrolment is 65.4%. The drop between standard IX and X is 54.4%.

The boys who leave these schools at standard VIII and IX level will mostly become apprentices. The minimum age for entering apprenticeship (for most industries) is 16. This is an average age for a standard VIII school leaver.

It seems quite obvious that there will have to be courses arranged for these pupils who leave in standard VIII, which terminate at that standard. The question which then arises is whether the junior secondary course ought to be devoted to general education, as it will be for the standard X school leavers, or whether some part of it, as well as the standard VIII course, be more specialised. What is quite definite is that boys and girls leaving school at standard VIII level and who become apprentices, should be able, without interruption, to proceed directly to the National Technical Certificate, Part Two, course. This means that they will have to have passed the National Technical Certificate, Part One, course or its recognised equivalent, before leaving school. This was discussed in more detail in Chapter 11.

When we come to consider girls who may wish to enter industry as apprentices, a radical change from what is going on at present in the housecraft schools will have to be made. If they wish to follow the same trades as the boys they will have to follow the same courses. This will mean that from standard VI onwards they will have to join technical high schools. The snag will be the mathematics and science subjects. As has been said before, mathematics is not generally a popular subject with girls and the science necessary for apprentice

courses is based largely on general physics and mechanics - something quite new for the type of girl usually to be found in housecraft schools.

It looks then, as though differentiation in technical high schools will have to start after the standard VII level and that three courses will have to be offered -

(i) the present M course for the few pupils who matriculate,

(ii) the present T course (soon to be called the S course) for those pupils who reach standard X school-leaving certificate level,

(iii) a pre-N.T.C. II course for the large number of standard VIII school leavers.

By no means all apprentices come from technical high schools. There are not nearly enough of them to supply the annual demands of industry. A problem is thus created. Boys leaving "ordinary" provincial schools at standard VIII level, at the most would have had a course in handwork, with which is associated some drawing and some knowledge of materials. They would almost certainly have to repeat the standard VIII course in order to acquire the trade theory and a more detailed knowledge of drawing. Depending on their previous course they might be exempted from mathematics and engineering science. It has been found that these boys do well if they are really interested in their trade. Nevertheless it may be necessary to make provision for more vocational schools to cope with this problem. With the man-power shortage it is not sense to wastea year of a boy's life through insufficient provision for vocational guidance and courses not devised for a specific purpose. The world-wide tendency is to shorten the period of apprenticeship by intensive training in the manual skills required, in centralised institutions, where highly trained instructors are employed for the purpose. Side by side with this intensive training goes the theoretical knowledge acquired in a technical college.

8.6. The Vocational Needs of Society

8.6.1. Statement of the Needs

In the de Villiers report there is this significant statement: "The economic prosperity and social progress of a country is not

determined in the first place by its richness in natural resources, but by the quality of its population. Every citizen in a modern democracy should be equipped to contribute effectively to the welfare of the group. Only when each individual produces the maximum of which he is personally capable can the highest possible welfare of the group be achieved. Our real wealth is in the potential abilities and talents of our youth, and in the character and skill of our people; our hope as a nation is in the widest utilisation of our human material." [1]

A little later it continues, "Although the school system is only one of the several factors responsible for the optimum development of our human resources, it is without doubt the most important single factor, and a well-organised, modern educational system, with its scientific vocational guidance service, recognising and paying due attention to individual differences, can do much to ensure the best possible development and utilisation of the latent potential of our youth." [2]

Then the question must be asked, "What do Industry and Commerce ask of the schools?" According to the Biebuyck report they want pupils to find the work they are called upon to do, congenial. They want them to have the general capacity to perform the work and the ability to understand and absorb the education and structure associated with the work. The world of work requires of pupils the power to communicate and calculate. It requires recruits of sound character and good personality, that is to say they must be truthful, reliable, self-reliant, conscientious, loyal and possess initiative. These qualities and traits of character are as important as the basic knowledge and skills required to start on the specific vocational training for which Industry and Commerce themselves are responsible. The everyday world recognises that basically the job of the school is to educate by whatever means seem appropriate in any particular case, for this is the basis, and as has been emphasised before, its formative aspect must not be lost sight of. [3]

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1. *Report of the Commission on Vocational and Technical Education. Op cit. p.23.*
2. *Ibid. p.23.*
3. *Biebuyck Report. Op cit. p.12.*

Among the many implications of the Economic Development Programme (1966-1971) there are a few which concern the school:-

(i) that it should try to raise the level of general education before employment training begins, so that pupils will be prepared in later life for adaptation and flexibile adjustment in the rapidly changing structure of modern economy;

(ii) that better guidance techniques, and methods of applying them be devised;

(iii) that research be undertaken to improve selection procedures and aptitude tests;

(iv) that the public be better informed on the crucial significance of technical education and training. [1]

Advocate J.F.W. Haak in a speech at Kimberley on the 3rd. April, 1965, said, "The Republic adopted a system of economic development programming, its first programme being released on 14th. December, 1964. The purpose of such programming is to stimulate economic growth by more effective use of the factors of production already in use, (i.e. labour, capital, ...), as well as by employing those factors of production which were previously unemployed. ..... According to the programme the demand for White labour in agriculture will decrease but will be constant in mining. In the manufacturing section it will, however, increase by 53 000 and in the services by 150 000 at the end of the year 1969. This is an indication of the main sectors in which White employment will be required in future.

As far as employment is concerned, the results show that by 1969 there will be a shortage of 47 400 Whites ..... . The man-power estimates are based on an assumed nett immigration figure of 20 000 White persons per annum, which appears to be an under-estimate in view of the present rate of immigration." [2]

1.Ibid. pp. 13 and 14.
2.Advocate J.F.W. Haak. Speech to the annual conference of the S.A. Association for Technical and Vocational Education. Kimberley. Saturday, 3rd. April, 1965. Journal for Technical and Vocational Education. Published by Voortrekker Press, Braamfontein. p.30.

Year	Immigrants	Emigrants	Gain
1964	40 865	8 092	32 733
1965	38 326	9 206	29 120
1966	48 048	9 888	38 160
1967	38 937	10 737	28 200
1968	40 458	10 589	28 989

(From "State of South Africa". Da Gama Press, Johannesburg. 1970 Edition.)

He then went on to say that towards the end of 1963, the Government established an Advisory Committee for Manpower Research and Planning under the direction of the Department of Education, Arts and Science with the idea of co-ordinating the activities of all Government and semi-Government institutions which are concerned with matters relating to manpower. It was the function of the Committee to advise the Government on the supply, training and utilisation of the Republic's manpower resources. He then proceeded, "With the aid of E.D.P., which reflects the economy's broad pattern of development, the Department of Planning will be able to furnish estimates of the total and sectional volume and types of labour required. It will then be the task of the Advisory Committee for Manpower Research and Planning to draw up a plan of training for the education authorities on the basis of the expected future pattern of demand for labour. As a next step, the education authorities will seek the co-operation of employers in the public and private sectors in order to adapt their syllabuses continually to technological developments, as well as to revise the combination of choices of subjects in the light of the needs of a changing economy. Thus the education authorities will be enabled to implement a flexible system of training, which will fit in better with the expected pattern of the demand for labour on a racial, sex, professional and sectoral basis.

By extending vocational guidance and aptitude testing, the education authorities will also endeavour to guide schclars in the early stages of their school career into those directions for which they show aptitude and also to persuade them to make full use of the training facilities which are available. ..... .

From what I have just said it must be clear that to obtain the growth rate envisaged by the Government, we will rely heavily on the

contribution of education.

A much greater degree of co-ordination, however, is essential if we are to combat the big evil of wastage of manpower in South Africa. There must be a determination to use human resources to the very best advantage, and this can unfortunately only be realised if our educational authorities show the necessary understanding and willingness to think in terms of the national economy." [1]

The Minister then went on, speaking now in Afrikaans, to emphasise three points. The first was, and this has been underlined several times before, that because modern commerce and industry make greater demands on the workers as educated and trained persons, technical and vocational education must include the necessary, general, formative education. He pointed out that more and more technicians and tradesmen were rising to posts of greater responsibility and hence were offered the opportunity to contribute to the raising of social and living standards in their own sphere of influence. The most able of them could, in addition, become leaders in their professions because of the technological future of this age. Thus the technical education system must offer the best means of discovering the potentialities of each pupil and student. The gap between artisan and technologist, he said, was still too wide. [2]

His second point concerned the manpower shortage on the professional level. He considered that technical training could be used to create a more purposeful distribution of available manpower. He pointed out that for every technologist there should be from four to eight technicians, depending on the branch of industry concerned, but that it was essential that these technicians be trained to a higher level than in the past. He implied, too, that the ideal arrangement being a pyramid, the lower layers of this pyramid must comprise better trained artisans and operators than heretofore. He was, however, stressing the better training of technicians so that they could undertake work at present

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1. *Ibid. p.30.*
2. *Ibid. p.31.*

handled by the engineer and which, in point of fact, was not engineer's work. This loss of engineers' time presented an economic problem which was causing concern in South Africa and which would not be tolerated in overseas countries. [1]

Minister Haak then made his third point - it has been mentioned before in other chapters - that too many children were leaving school either at the end of the primary course or too early in the secondary course, in many cases because of insufficient encouragement and attention. These children needed special care and training and careful attention should be given to their educational programmes. This would probably involve wider choices of subjects and opportunities to change courses until the most suitable was found. [2]

Advocate Haak concluded his speech by pointing out that it was absolutely essential that educational programmes be kept in line with the needs of employers. This applied to all levels of education, technical and technological. This, he said, meant far closer liaison with industry than ever before. The larger industries should assist the smaller industries and the schools. On the other hand, it was clearly the duty of the teaching profession to keep in close touch with industry and commerce, so that modern methods, developments and organisation were familiar to them. In emphasising the absolute necessity for a more scientific approach to all the problems he had enunciated, he promised the support of his department to the teaching profession, upon whose shoulders such an important burden was carried. [3]

8.6.2. <u>How is education to contribute to these needs</u>?

The Biebuyck Report's statement of the vocational needs of society taken together with Advocate Haak's exposition, summarises briefly but accurately the demands which modern society makes upon the worker. The question which now has to be answered is whether these demands are

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1. *Ibid. pp.31 & 32.*
2. *Ibid. p.32.*
3. *Ibid. p.32.*

***N.B.** Advocate Haak was, at this time, Minister for Economic Affairs.*

going to be met by the kind of education which will simultaneously satisfy the individual needs and develop personality? Is the curriculum discussed earlier in this chapter adequate?

Jacks' statement of the aim of education is that it must produce an educated and a self-educating democracy, [1] *and he goes on to show that there are many aspects to this - physical education, intellectual education, emotional education, moral, spiritual and social education - and, whereas the educational institutions can play their part by providing a foundation, education comes also from holding a job down, from playing a game, from courting, from being a member of a club and undertaking in it some task, however trivial, which contributes to the common good. Education comes from active self-expression, routine, discipline and control.* [2]

A great part of this is not within the control of the school. To name but a few aspects of education which are outside the direct control of teachers-the influence of home, friends, trade unions, employers, the cinema, sex life, falling in love - all of which are part of experience and therefore of education. Educationalists can only exert an indirect control over these by helping the pupils to manage these experiences, by showing the necessity for struggling until the conflicts are identified and their significance revealed and any good in them used. [3]

The influence that they can exert is, however, very much greater than is generally realised, despite the fact that it is indirect. Perhaps the most neglected part of the educative process is affective learning - the development of interests and ideals. These are the dynamic aspects of mental life and their development depends on factors quite different from those which lead to other forms of learning. In the previous paragraph some of the situations in which such learning takes place were mentioned. In this paragraph the concern is with the situations over which teachers have control and so very often do not

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1. *"The Education of Good Men" Op cit. p.82.*
2. *Ibid. pp.82-85.*
3. *Ibid. p.86.*

realise it or do not wish to be bothered with them. If a pupil is confronted with a situation and responds to it in a way which he finds satisfying, he is likely to respond in the same way on subsequent occasions and if the response is consistently satisfying, it becomes a habit. If the response is related to some behaviour value, the habit is called a trait of character, for example, truthfulness. The point which is so often overlooked by teachers is that the factor which reinforces behaviour patterns is immediate and consistent satisfaction. It is not the task of the teacher of Biblical Studies, nor of the teacher psychologist, nor of any other specialist teacher, to give particular attention to this vital aspect of education. It is the task of every teacher to take advantage of every suitable occasion to try to develop the interests and ideals so essential to the spiritual growth of their pupils. This learning, which so often goes on without the pupil's knowledge, can start in so small a way as learning to cross t's and dot i's and take a joy in not forgetting to do it. It can occur by generous approval given to consistently neat and careful work. There are hundreds of situations in which the teacher can create the atmosphere conducive to affective learning. However, the object here is not to write an essay on affective learning but to indicate that teachers have an important part to play in contributing to the needs of society other than through formal classroom teaching. It was Ruskin who wrote "Education does not mean teaching people to know what they do not know; it means teaching them to behave as they do not behave", [1] quoted Sir Richard Livingstone, and went on later, in his discussion of the four fields in which excellence is the concern of everyone, to give his opinion that "To see the vision of excellence, so far as our limitations allow; to get at least a glimpse of the unchanging values of the eternal world as they are revealed in whatever is beautiful and good in the material world of earth; to attempt to make one's infinitesimal contribution towards a society which will

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1. "Some Tasks for Education" Op cit. p.28.

embody them more fully than does one's own - to do that is to take seriously the tremendous words of Christ: 'Be ye therefore perfect, as your Father in Heaven is perfect'." [1]

To pass now from what Jacks termed emotional, moral and spiritual education, some further attention should be given to the intellectual education which he rightly states is a part of the education of his educated and self-educating democracy. He points out that some education in human relations is necessary not only because of its human but because of its economic importance. When the disastrous effects of strikes and violent demonstrations are considered it may well be that this aspect of education is not receiving all the attention that it should. In this field the teacher-psychologist will have a large part to play because his task is not just giving vocational guidance but giving individual and group attention to problems arising from current events, in helping in the solving of personal emotional problems - in fact, in general counselling. Here again other teachers will have their part to play whenever opportunity presents itself.

Then there are two efficiencies which are essential and can only be developed by an educative process which is long and right. The first of these is what Jacks terms "basic efficiency", that is the mastery of the tools of learning - reading, writing, counting, observing and thinking - which are the fundamental skills and may be being relegated to a position of secondary importance in favour of superficialities. [2] *The second efficiency is technical efficiency which implies the need for hard work, thoroughness and a sense of responsibility in order to achieve a high standard of execution in daily work.* [3]

So far as the length of school life is concerned there is a growing tendency for pupils to stop longer at school and for a greater number to follow continuation classes of one sort or another. These extra school years must be used properly and it cannot be over-emphasised

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1. *Ibid. p.50.*
2. *"The Education of Good Men" Op cit. p.79.*
3. *Ibid. p.79.*

that the attitudes and outlooks of the teachers, their example and methods must stress these essential values. They must teach the method of learning more than the subject content. They must encourage habits of independent, honest and logical thought. Spoon feeding must stop. Whitehead would have put the position in this way, that there must be no assimilation of little understood facts and second-hand opinions. There must be no inert ideas.

All these principles are well enough understood by the top level educational authority in most parts of the world. Hence the present emphasis on "insight" and the tendency to give pupils more time in examinations to think out solutions to problems which are not as stereotyped as they used to be. The danger of over-loading syllabuses has been referred to. This will be particularly important in the courses which do not lead to tertiary education. Here attention will have to be given to the development of the efficiencies which have just been discussed and to ensuring, so far as that is humanly possible, that by adequate guidance at home and in school, by the fostering of interests, by the provision of education suitable to the age, ability and aptitude of the pupils, that there are no square pegs in round holes. The school must see as one of its major objectives the development of happy citizens.

Sir Richard Livingstone wrote, "For Plato saw what we ignore, not only that education is the basis of the state, but that the ultimate aim and essence of education is the training of character - to be achieved by the discipline of the body, the will and the intelligence". [1]

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1. "Some Tasks for Education" Op cit. p.33.

CHAPTER IX

The Concept of the Comprehensive School

9.1. Introduction and Definition

In his book "The Comprehensive High School", James Bryant Conant, the well-known American educator, makes the statement that the concept of a comprehensive high school is foreign to educators in other countries.[1] This was written in 1966 or thereabouts, since the first edition of the book was published in 1967. Certainly the term is new to most South Africans but certainly not some of the concepts. Dr. Robin Pedley, Director of the Exeter University Institute of Education, is one of the leading British protagonists of the comprehensive school and he wrote his book "The Comprehensive School" in 1963. Exactly when the idea of this type of school emerged is not clear to me. There have been such schools in England for more than twelve years[2] and so, presumably, if we accept John Gardner's statement, written as a foreword to Conants' other well-known book "The American High School Today", we shall obtain an origin and a definition in one paragraph: "The comprehensive high school is a peculiarly American phenomenon. It is called comprehensive because it offers, under one administration and under one roof (or series of roofs), secondary education for almost all the high school children of one town or neighbourhood. It is responsible for educating the boy who will be an atomic scientist and the girl who will marry at eighteen; the prospective captain of a ship and the future captain of industry. It is responsible for educating the bright and the not so bright children with different vocational and professional ambitions and with various motivations. It is responsible, in sum, for providing good and appropriate education, both academic and vocational, for all young people within a democratic environment which the American people believe serves the principles they cherish."[3]

John Gardner was President of the Carnegie Corporation of New

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1. James B. Conant. "The Comprehensive High School" McGraw Hill Book Company, New York. 1st. Edition. 1967. p.3.
2. Report of the Central Advisory Council for Education. 15 to 18. Op cit. p.24.
3. James B. Conant. "The American High School Today" McGraw-Hill Book Company, New York. First Edition. Third Printing. March 1959. pp. IX and X.

York. His comments are therefore worthy of serious consideration.

Conant went on to say that in the fifty odd years during which high schools developed in America it became accepted doctrine that youths with all varieties of ambitions and abilities were to be provided with the necessary instruction. Few subjects were to be compulsory; thus the majority would be electives. Compulsory attendance made for large schools and the elective system for heterogeneity. This has come to be regarded as an advantage. Boys and girls from different environments come to know one another and special efforts, we are told, are made to ensure that they understand one another. The comprehensive high school endeavours to provide a general education for all future citizens on the basis of a common democratic understanding. Its ideal is to provide in its elective offerings excellent instruction in academic fields and in good vocational education. [1]

9.2. Vocational Guidance

Conant points out the necessity for a counselling system, presumably what we term a vocational guidance system, which has never been underestimated but is even now not nearly sufficiently provided in South African schools. Obviously enough where a system of elective subjects obtains with a minimum of compulsions, the need for adequate guidance becomes the more important.

9.3. Vocational Content

The details of the American high school will not be discussed here in detail. Were South Africa to adopt any such system the details would have to be worked out to suit our conditions and this would be time enough to compare subjects, time devoted to subjects, courses, hours of homework and the multiplicity of detail which go to constitute the routine of a school. The immediate purpose here is to examine broad principles and to seek answers to questions which come readily to mind when considering whether a change of system is worth consideration.

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1. James B. Conant. "The Comprehensive High School" Op cit. p.4.

Hence this quotation from Conant: "My inclination is strongly in favour of including vocational work in a comprehensive high school instead of providing it in a separate high school. My reasons are largely social rather then educational. I believe it is important for the future of American democracy to have as close a relationship as possible in high school between the future professional man, the future craftsman, the future manager of industry, the future labour leader, the future salesman and the future engineer ..... . I am convinced that one of the fundamental doctrines of American society is equality of status in all forms of honest labour as well as equality of opportunity". [1]

And another point about which he felt strongly was that as many high school pupils should have an ultimate vocational goal despite the fact that many would change their minds about it either at school or thereafter. His point was, of course, that study for a significant purpose takes on a new importance. There is less tendency, he thinks, for "committed" students to waste time or to have a negative attitude towards work. [2]

There is yet another point which is relevant to the theme. It is the question of when vocational education should begin. Should it be given in high school or postponed to a two or three year intensive college course? Conant considers the question of motivation here to be very important. There are some pupils, he feels, to whom formal education is at best a bore. "Better teaching and smaller classes can reduce this number. The ambition of the parents and the neighbours play a large role in many cases. I am sure, however, that an appreciable percentage of this type of student remains in school with some enthusiasm because attractive opportunities for vocational education are provided. Moving these facilities to another institution would remove a motivating force." [3]

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1. *Ibid. p.62.*
2. *Ibid. p.62.*
3. *Ibid. p.63.*

9.4. Ability Grouping

One last point which will have to be considered and which is controversial, is that of ability grouping. Conant believes that the comprehensive high school provides the opportunity for ability grouping subject by subject. [1] One's first reaction to this is the organisational problems posed in the school by such an arrangement; it obviously works in some schools known to him and it will be interesting to see what other protagonists of these schools have to say about it and the other problems of organisation involved, because it is reasonably obvious that for a comprehensive high school to function it must have a fairly large pupil enrolment. Conant's suggested minimum is 750. [2]

9.5. Dr. Pedley's Definition

Dr. Robin Pedley's name has already been mentioned as a strong supporter of the comprehensive high school. He says, quite correctly, that educationally subnormal children, the physically handicapped children and those catered for at fee-paying schools apart, the primary schools in England are comprehensive schools because they take practically all the children from a neighbourhood despite their varying abilities and try to give them the education best suited to their needs. He points out, of course, that in a primary school the curriculum is, for the most part, common but that the subject matter and its presentation is varied to meet the needs of the various class groups and the individuals within these groups. The actual methods by which the ultimate aim of the course is achieved is not at this particular point pertinent, What is of particular importance is what Pedley calls the agreed end of education - "the full development and progress of the individual child". [3] The comprehensive high school is an extension of the comprehensive primary school taking practically all children from a given district between the ages of eleven and fifteen as well as those who wish to stay on to eighteen or nineteen.

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1. Ibid. p.30.
2. Ibid. p.2.
3. Robin Pedley. "The Comprehensive School". Penguin Books Ltd. 1963. Harmondsworth, Middlesex, England. p.21.

He, too, points out the wide range of interests that has to be catered for, the problems that arise in connection with the grouping of pupils according to age, ability, special interests or combinations of some or all of these. [1] But then he makes a point which may be very relevant to the South African situation. "A comprehensive school will not however be divided into distinct, separately organized sides, such as grammar, technical and 'modern'. A secondary school so arranged would be a multilateral school ..... . Multilateral and bilateral schools are uneasy compromises between the comprehensive idea and the belief that there should be distinct types of secondary schools to cater for different types of child. They sometimes have the defects of both and the virtues of neither." [2]

9.6. Assessment of Pupil Ability

It may be as well to give a very brief description of the 11+ examination as used in England and Wales for the purpose of selecting grammar school pupils and which has been the cause of so much controversy. It is sometimes used to place pupils in technical schools (although very few of these now remain as separate entitities). The examination may take anything from three months to three years to complete. At its best it is perhaps the most thorough examination ever devised, and it is usually administered with meticulous fairness. It normally consists of four parts: (i) tests of intelligence; (ii) tests of attainment in English and Arithmetic; (iii) records of child's work at primary school with teachers' recommendations; (iv) interviews, in borderline cases. ..... Children with I.Q's of 120 and over usually qualify for places in grammar schools. The proportion of children admitted to a grammar school varies according to the number of places available and the policy of the local education authority. The average for England and Wales is 20 per cent. [3]

Most neutral observers would probably reach the conclusion that

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1. Ibid. p.22.
2. Ibid. p.22.
3. Ibid. p.16.

the reason for the increasing popularity of the comprehensive high school in England and Wales is the disturbing fact that many pupils who failed the 11+ examination in so far as entrance to a grammar school was concerned have developed late and done at least as well as those who pursued the normal grammar school course. The Crowther Report, for example, says, "Much careful research work has shown pretty clearly that a fresh classification after four years, i.e. about the age of 15, would have redistributed between selective and non-selective schools about 14 per cent of the pupils. By the time they join up for National Service this 14 per cent has become 22 percent among Army recruits and 29 percent among the more homogeneous group of R.A.F. recruits, according to the evidence of the National Service Survey. ..... and it seems increasingly clear that we cannot hope to avoid error by further refinements in the process of selection. The problem is not confined to selection for secondary schools. It occurs whenever it is necessary to select candidates - for employment quite as much as for education. With human beings, no selection can be regarded as final." [1]

9.7. Differentiation

In South Africa we are not plagued with such a selection system. Generally speaking children, from the White sector who wish to proceed to a high school, find a place in one or other high school. This discussion of the purpose of the comprehensive school is not because of this problem. It is rather to do with the subject mentioned in Chapter 1, differentiation. The problem is to find the right type of education for every child, to push every child to his full potential and thus avoid frustration for him and ensure a happy citizen for the nation. This is the real problem confronting us in South Africa. We cannot afford, from any point of view, one wasted or frustrated life. Because of the importance of this discussion there are a few more ideas of Robin Pedley's which should receive most serious consideration.

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1. *Board of Education. Report of the Central Advisory Council for Education. Op cit. p.72.*

This, for example: "The average Englishman is confused about the meaning and implications of equality. He takes it for granted that equality implies flat uniformity, that equality in education would impose the same subjects, the same teaching methods, the same pace of progress, on pupils who obviously differ enormously in their ability, interests and characters.

Though some levelling-up is certainly involved, a featureless levelling out would of course be a denial of all we have learnt from psychology and education. The differences between individuals are infinitely variable and complex, and our aim is the full development of everyone's talents." [1]

Now this is not true only of the Englishman. It is very strong in North Western Europe e.g. in Holland and West Germany. We find it in the great majority of South African parents. The schools they seek for their sons and daughters are the "best" schools, by which is meant those long-established schools with good academic and sporting records. The curriculum must be English, Afrikaans, mathematics, Latin, a science subject and either history or geography. To depart far from this is simply "not done". This has become as much a part of South African thinking as that of any other nation. Professor M.C. Botha made two very pertinent references to this in his annual reports. "There was a time when our educational system made provision for the vocational training of the intellectual aristocracy only, Matriculation was the Alpha and Omega of all our education, and matriculation is the natural avenue which leads to the higher professions ..... . The boy or girl who did not possess that peculiar intellectual equipment demanded for the successful study of Latin or mathematics had to make the best of it, and take his or her chance in life without any specific vocational training ..... ." [2]

His second reference was possibly even more to the point. "Most urgent of the matters which needs objective consideration is that of

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1. *Ibid. p.24.*
2. *Annual Report, Union Education Department, 1933 and 1934. Op cit. p.6.*

secondary education, which may be defined as differentiated education provided for adolescents ..... . It is in this area that re-organisation and co-ordination are badly needed. On the one hand we have the provincial education departments providing secondary education predominantly of the traditional academic type, and on the other hand we have the Union Education Department also providing secondary education, but chiefly of the more differentiated pre-vocational and vocational type in the vocational schools and the technical colleges. Efforts to bridge this gap between these two types of education in order to give that differentiation which the adolescent boy and girl needs about the age of 13 have all failed. In the meantime the poor adolescent is the victim of this administrative dualism, and his education, which should be a normal. continuous growth, is sorely impeded at a most critical stage of his life. It is the age at which boys and girls outgrow their childhood. It is here where new interests should be provided, otherwise their characters degenerate into an aimlessness which is disastrous. Soon they reach the compulsory limit and many of them have to enter the labour market very poorly equipped as regards character, or scholastic or vocational preparation." [1] *He went on to discuss the position in Europe where it was possible to obtain some measure of differentiation after the primary stage and before reaching school leaving age. He then said that there were 84 000 boys and girls of 13 years of age or more, and 48 000 of age 14 or more still in primary schools in South Africa. Ninety per cent of these had received six or more years of education which should have given them a sufficiency of the tool subjects, but instead of shifting to new interests they were kept grinding away at the rudiments until they were sick of school. He expressed his opinion that <u>every</u> child needed at least three years of differentiated education before reaching 16 years of age. He stated, too, that only 10 out of every 100 reached the coveted goal of matriculation and of the 90 who fell by the wayside, only 60 passed*

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1. Annual Report of the Union Education Department. 1935. Op cit. p.8.

standard VI. This perturbed him. This is a cause for concern by many people still.

Catherine Taylor, M.P., writing in the Argus of Monday, 18th. May, 1970 in an article on the State of Education - 1 -"The long years of neglect," quotes some more recent figures.

"A survey of some aspects of White manpower resources, reported in October, 1962 - (National Institute of Personnel Research) revealed that 25 per cent of South Africa's White male population had no intention of proceeding with their education after standard VII:'There was, in fact, evidence that close on half of this group, or from one-eighth to one-ninth of the total male White population, had not proceeded beyond standard VI. ..... In 1959, 48 per cent of all White pupils in the Cape Province left school at the age of 16 with only a standard VI or standard VII certificate. ..... By 1966 the school-leaving figures for the country as a whole were: 35 per cent of all White pupils who left school had not studied further than standard VI and 55 per cent had not gone beyond standard VII. Just over 10 per cent passed matriculation and less than half of these went to university.' (Vide Professor E.G. Malherbe, former Principal of Natal University in a paper given to the English Academy of South Africa. October 1966.) "

Dr. Botha's point was that this was a national concern and transcended provincial boundaries and that, therefore, a national board of education was required to exercise general control over the whole of the secondary field. He said, quite correctly, that we were at that time attempting to "divide the indivisible". [1]

No one today would disagree about the necessity for all types of secondary education to be under one control, provincial or central governmental. It may well be that the Provinces may prove to be too large as units for efficient control. The problem that really is basic is that of providing a sufficiently varied list of elective subjects in order to secure the interest of every pupil. This idea is not new. According to Dr. E.G. Malherbe, it was in 1920 that secondary education

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1. Ibid. pp. 8 and 9.

in the Cape was re-organized with the idea of instituting differentiated courses of secondary instruction so as to make provision for the varying needs of the pupils. [1] Up till then the curriculum in secondary schools was very much under the influence of the matriculation examination of the University of the Cape of Good Hope and later of the Joint Matriculation Board. It still is, though not to the same extent. (There is, too, abundant evidence that this latter board is becoming much more liberal in its thinking about entrance requirements to university faculties.)

We are still, in South Africa at any rate, very examination-conscious. "In gradually replacing birth and wealth by the ability to pass examinations, we are doing no more than replace one rule for the queueing order by another. Our philosophy is still dominated by the belief that life is a race for a few limited prizes. It is fundamentally a philosophy of limitation and restriction. Its doctrines are that the weakest must go to the wall, that the race is always to the swift and the battle to the strong. It is the bitter cynical conclusion of the materialist. ..... basically the philosophy is rooted in the idea that one can only advance at the expense of someone else, in relation to that person's failure to keep pace. It is still the law of the jungle. Against this it is imperative that we repeat and re-state in modern terms, applying it in detailed argument each to our own field, the philosophy which, though to Christendom 2000 years old, is still very new in terms of the whole span of human life on the earth. It is possible for <u>all</u> children, <u>all</u> adults, to have life and to have it abundantly; but not until we abandon our practice of appropriating the cream to a few and leaving the rest to get what nourishment they can from the blue milk." [2] And Robin Pedley went on to write something well-known to all teachers, who, when parents are asked what they want for their children, reply "Happiness". Very often the way of acquiring

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1. "<u>Education in South Africa 1652-1922</u>" Op cit. p.169.
2. "<u>The Comprehensive School</u>" Op cit. p.26.

this desirable state is ill-understood. It comes, according to Pedley, from controlled but unperverted growth and is not to be confused with soft and pleasant living. This is a lesson that has to be taught and re-taught to present day pupils. Aristotle said that it was implied in "being usefully active, developing according to the laws of one's nature, developing the best in one's nature." [1] Full growth demands exertion, stern testing, adaptation to the environment. Our pupils have to learn to live as members of society because we are social animals; but it is still necessary to recognise that individuals are unique. We need the Soviet insistence on raising the educational level of all; we need the American insistence on individual freedom, to move at his own pace along the path of his own choice; we need the English traditional faith that only the highest standards of teaching and learning are acceptable. [2]

9.8. Mayfield Comprehensive Girls' School

So far the basic philosophy of what the Crowther Report terms "the most controversial of the variants" [3] has been discussed. This type of school has many opponents and critics. Many questions have been asked and are being asked about these schools and many have been the prophecies of doom. In 1968 Miss Margaret Miles published a book "Comprehensive Schooling" after twelve years' experience of running one. But let it be added immediately that this comprehensive school was formerly one of the well-known London girls' grammar schools - the Putney County Secondary School - which had been in existence since 1907. Furthermore, Miss Miles was the headmistress of this school when it was converted to a comprehemsive school. It may be assumed that the report she gives in this book is to be relied upon.

9.9. Critics' Prophecies

Critics said that the following were bound to happen:

(a) There would be a levelling-down of standards. Grammar school types of girls would want to leave at 15 years of age. The standard

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1. Ibid. p.30.
2. Ibid. p.31.
3. Crowther Report. Op cit. p.24. Vol. 1.

of the ablest pupils would fall to that of the average or even below average pupil.

(b) The comprehensive school would overshadow the able 15 year old pupil who would have shone at a secondary modern school.

(c) The comprehensive school would be so large that it would become impersonal and the children would not feel that they belonged.

(d) The grammar school type of girl would take all the leading positions in teams, orchestras, choirs etc., and as prefects.

Miss Miles says that these warnings were carefully noted by the staff and proved a great factor in preventing these things happening and in ensuring that the criticisms were not justified. [1]

The prophecies are pertinent enough to be dealt with in detail.

9.9(a) Levelling-down

When a pupil enters a comprehensive school no limits are placed at the time he enters as to what he may ultimately do. There is no question of being allotted at the age of 11 to streams or saddled with strictly limited aspirations. No assumptions are made about either the ultimate destination of the child or about the length of his course. [2] *Any selection that is made is by the child. All doors are open and, in basic content, there is no differentiation of curriculum, although it is likely that interpretation will vary according to the individuality of the pupils. Given a common base it is possible for the pupils in due course to make a selection of the subjects which they need, want to do and have the capacity to follow. Undue value is not placed on any one branch of learning. Academic learning is respected and admired but is not considered the only good.* [3]

Thus we can readily see that the critics had some ground for their arguments. In point of fact what has occurred? Miss Miles writes "A comprehensive school demonstrates that it is not only the 'clever'

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1. *Margaret Miles. "Comprehensive Schooling" London. Longman, Green & Co. Ltd. 1st. Edition. 1968. pp. 62 and 63.*
2. *Ibid. p.2.*
3. *Ibid. p.3.*

who should be respected ..... there are many contributions which ordinary children who may not be 'clever' can make and which are appreciated as part of the total life in the school. Cooking, pottery, dressmaking, playing an instrument or swimming are all admired, appreciated and have the same sort of 'kudos' as academic achievement. Academic girls, of course, also take part in these activities.

I do not intend to imply that academic achievement is denigrated; on the contrary, at all levels there is no upper limit and there is no sense of having to stop when a set standard is reached; doors are continually open so that individual girls may go as far as they can. The girls who have won academic distinction have done so without being pressed, without sacrificing other branches of their school life, and many have reached a standard that they would probably not have bettered if they had been in a selective school. They also have been much admired and respected." [1]

Thus much then for school subjects. More than these are implied in the criticisn of levelling-down. This argument was typical, that girls from secondary modern schools leave school at fifteen and this would influence the majority of girls to leave at this age, including the grammar school type.

In 1955-56 the school took over the traditional pattern of the London secondary technical schools by providing in addition to the normal academic courses, courses in catering, housecraft and commerce, at about the age of thirteen. After the first generation had gone through it was found possible to postpone the starting of the technical courses until the age of fourteen. These courses did not lure away girls from academic courses and Miss Miles states that she can remember very few cases where girls chose a vocational course who would have been better advised to pursue an academic one. Her opinion is that the variety of courses available has been that pupils have opted naturally

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1. Ibid. p.3.

for the course for which they were best suited. The effect of the change was not to cause pupils to leave school early but to encourage many, who would previously have left at the minimum age, to stay on.[1] *It has been shown that there are far more people who want and can benefit from an extended secondary course than was ever imagined. If courses are provided and opportunities are there, the vast majority of pupils want to stop on beyond the statutory leaving age.*[2] *This is a most important finding.*

Another aspect of levelling-down is that of examination achievement. Miss Miles points out in this connection that the sixth forms contain girls of rather limited academic ability who contribute much and have benefited from an extended education. These will be better wives, mothers and workers; but, apart from this very important aspect, is the fact that far more girls have been able to take 'O' and 'A' levels than used to be assumed possible in the segregated system. In addition the introduction of the Certificate of Secondary Education (C.S.E.) caused a further increase in the number of girls stopping for a fifth or sixth year. She sums it up by saying that the standard of the able girls has <u>not</u> dropped but that the standard of the average and below-average girls has undoubtedly been raised.

There are a few more points in connection with this predicted levelling-down process that must be mentioned. It was said that the secondary modern type of girl would refuse to wear uniform, would refuse to do homework and would refuse to conform to the standards of a full-time school. We are told that the response that is obtained is remarkable and the standards of society are up. "It is perhaps a good thing today that education concentrates more on the <u>content of education itself</u> and on <u>personal development of children</u> rather than on superficial appearance."[3] *To sum up, Miss Miles says definitely that experience has shown that these fears about levelling-down are unfounded.*

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1. *Ibid. p.11.*
2. *Ibid. p.63.*
3. *Ibid. p.64.*

9.9.(b) The comprehensive school would overshadow the able fifteen year old who would have shone in a secondary modern school.

The answer to this prophecy is more than sufficiently answered in the above paragraphs dealing with levelling-down. Before the 1944 Education Act about 25 - 30 per cent of children who were just above or below the half-way point on the normal curve of distribution of ability were excluded from grammar schools. Experience of middle-class families and of the Public Schools in England shows that many children of only average ability are able to benefit from what is regarded as grammar-school education and leave school at seventeen to eighteen as educated people. 25 - 75 per cent of the same type of child, depending upon the local education authority, attending state schools were denied this opportunity. This is no longer the case. Remember again, the stated purposes of the comprehensive school: (a) that all doors are open and all the school's resources are available to everybody; (b) that an optimistic approach to school work and personal development is essential, that approach which assumes that children will do well rather than that which accepts a verdict that they are incapable of attaining certain standards. It has been stated that these pupils are passing 'O' levels in the C.G.E.; some are passing 'A' levels. [1]

9.9.(c) The size of the comprehensive school.

A comprehensive school is larger than any grammar or secondary modern school. It has to be or it could not provide full opportunities for the age-range and the wide spread of ability. It was decided that Mayfield was to be a 2 000 pupil school. The number was arrived at by multiplying the 500 entry into the grammar school by $\frac{100}{25}$ because 25% of pupils went to the grammar school.

Experience has shown that there are many potential sixth-formers outside the 20-25 percent grammar school selection. "Indeed", says Miss Miles "all comprehensive schools, even those starting with a very limited range of ability, have produced sixth forms". Later planning

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1. Ibid. pp. 14 and 15.

has shown that a 1 250 - 1 600 pupil comprehensive school provides the amenities demanded. [1]

This, of course, does seem to us a very large number of pupils; but we should remember that there are some Transvaal high schools with ± 1 200 pupils while in the Cape Province we have two combined technical-commercial high schools with more than 1 000 pupils. This pattern of large schools is going to be forced on us in South Africa, particularly in the urban areas, so perhaps we should examine the situation more carefully.

9.9.(c)(i) Economy and sites

It is obviously cheaper to build one large school rather than three or four smaller schools. Apart from the economy in building materials, there is the growing difficulty of acquiring adequate sites. The tendency will have to be towards multi-storey building.

9.9.(c)(ii) Libraries

Libraries are supplied on the basis of the number of pupils in a school but it is obvious enough that a large library in a very large school is of more use than a number of smaller librories in smaller schools. It also provides an opportunity for a more adequate research section for senior pupils or even a separate senior library. Then, too, large schools are allocated full-time librarians, thus reducing the extra-mural activities of teachers and replacing them by properly trained personnel.

9.9.(c)(iii) Amenities

There is much more chance of a very large school attaining expensive amenities, such as language laboratories, swimming baths and pottery kilns than smaller schools, if only for the reason that they will be fully used. Most Education Departments have a horror of seeing facilities not being fully used and regard such equipment as waste capital.

In this connection Margaret Miles has some advice to offer.

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1. Ibid. p.19.

" ..... because a school of five hundred had one gymnasium it was decided that a school of two thousand should have four. We now know that we would prefer to have the extra space ..... deployed in a different way: a swimming bath or a covered games hall, perhaps, as well as a gymnasium.

Similarly, because an ordinary sized school has a hall, a bigger school, it was assumed, must have a correspondingly bigger hall. But experience has led us to want not one big all-purpose hall but two or three specialist halls (which need not be so big) for drama, music and so on. Such a variety of assembly space should be one of the advantages of a large school.

Working in a comprehensive school has revealed a need for different sized rooms: small ones for counselling of all kinds, for interviews by form and house mistresses, for seminars, for oral language work, for remedial work with small groups; and large ones for films, television and lectures." [1]

Here is plenty of food for thought for education planners and school architects!

9.9.(c)(iv) <u>*Curriculum*</u>

In a very large school there will be a large staff and, because class groups can be economical, it is possible to provide a very wide choice of elective subjects with specialist teachers for all of them. This is, as previously mentioned, fundamental to the philosophy behind this type of school and need not be stressed further at this point.

9.9.(c)(v) <u>*Extra-curricular activities*</u>

A very large school provides a lively and varied social group presenting a demanding but interesting background against which to work. In addition it has been found that the variety and number of hobbies and interests represented in the large community of the staff of really big schools is remarkable. [2]

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1. Ibid. p.6.
2. Ibid. p.20

9.9.(c)(vi) Parents

The very large group of parents provides interesting and varied links with the society of the neighbourhood and with a variety of professional and other bodies.

9.9.(c)(vii) Staff room relationships

Miss Miles has reached the conclusion that in a big school the petty jealousies and strains in relationships that sometimes arise in a small group thrown closely and continuously together are avoided. "When everybody does not know everybody else's business, there seems to be a more mature general atmosphere." [1]

9.9.(c)(viii) Pride in size

"It has always seemed to me that size does bestow a certain dignity and impressiveness upon an institution." Apparently a certain feeling of pride develops in both staff and pupils. [2]

9.9.(c)(ix) Administration

In a very large school it is quite obviously impossible for the head and deputy-head to attend to all details of administration. Many principals in South Africa justifiably complain that their function includes that of being a second-grade clerk. The comprehensive school has a well-trained administrative officer appointed to deal with routine matters of buildings, money, non-teaching staff etc. This still leaves an enormous amount of organisation to be done by the principal and deputy-principal. The problem of time-tabling alone is considerable as is well-known to those of us who have had to deal with the problem in universities and technical colleges. Apparently this problem is being solved by special training being given to trained teachers who show an aptitude for administrative work. They will be called teacher-administrators. [3]

9.9.(d) Individual pupils

Of all the criticisms hurled at comprehensive schools the commonest is that it is impossible to accord individual pupils enough care. To

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1. Ibid. p.20
2. Ibid. p.20
3. Ibid. p.23.

those who have been principals of large schools this is no new problem and has worried many of us over the years. Mr. Abernethy, the much-respected and very experienced principal of Pretoria Boys' High School, a very large school of ± 1 200 pupils, had something to say on this problem in his annual prize-giving speech on 29th. November, 1961, which he dedicated to the "Unknown Boy". This boy he described as the good, solid, reliable, "average" pupil who passes through the school unnoticed, with praises unsung and yet who helps to form the backbone of the school. The principal quoted from Socrates, that portion which describes the educated person as one who manages well the circumstances which he encounters daily, who is decent and honourable in his intercourse with all men, who holds his pleasures under control, who is not unduly overcome by his misfortunes and who is not spoiled by success. This happy state, Mr. Abernethy said, was within the reach of all and, he added, luck seldom blesses men. Success you deserve. He thought that there should be in all schools a monument to the "unknown boy".

Now this is very true. Is it equally true when we think, not of highly selective schools, but of comprehensive schools which cater for all ability groups and all social groups? Miss Miles has much to say in this connection, for example, that there is no rift between secondary modern and grammar school 'kinds of girl'. The differences between people, she says, are unimportant and small compared with the similarities between them when they are exposed to the same situation. She says, too, that to talk of grammar schools as though they were a closely identifiable group of schools, is not possible. [1] This is, of course, true. There are good and bad, large and small, as in any other classification.

So much for a new problem being created by a mixture of pupils of varying abilities and social groups. The real problem is that of the large numbers which makes it impossible for the head or deputy-head to know personally every pupil. Miss Miles says categorically that every child is known as an individual by one or more members of the staff. [2] There are a variety of ways in which this is accomplished.

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1. Ibid. p.11.
2. Ibid. p.21.

Circular 10/65 of the British Ministry of Education lists six different acceptable comprehensive organisational patterns. It is, therefore, impossible to discuss all the ways which are used to secure sufficient personal contact with each pupil. It is possible to list the basic functions of the sub-divisions into which the school must be divided. They are that each group must be -

(i) a good disciplinary unit;

(ii) a sound basis for activities;

(iii) able to provide good pastoral care;

(iv) educationally and socially useful (i.e.) able to give a feeling of identity and belonging to each pupil.

It is vitally important that each pupil should know to whom he may refer difficulties, receive encouragement, obtain information and receive direction and punishment. This apparently suggests tutorial groups of about 30 pupils.

Beyond this it is probably not the place in this chapter for further discussion. If we have to establish very large schools in South Africa, then will be the time to try out patterns and find those which suit our peculiar circumstances. A pattern for an urban area is not likely to be entirely suitable for a rural area with mostly boarding schools or at least a high percentage of boarders.

9.9.(e) <u>The grammar school pupils will take all the leading positions</u>.

Experience in England has shown that many of the finest contributions to music, drama and games have been made by pupils who did not obtain a grammar-school place at 11+. Of course equal contributions have been made by those who did, but certainly the grammar school type of pupils have not done everything. [1]

At Mayfield there are a number of pupils who enter the sixth form with no 'O' level qualifications. In fact for registration and group purposes pupils are registered in mixed ability groups. Each group has

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1. Ibid. p.66.

girls doing 'A' levels, some doing mixed 'A' and 'O' levels, some doing secondary courses with some 'O' levels, some doing partly secondary and partly non-examination work. Each tutor group in the sixth and seventh year is a cross-section, and this is considered very important. Each group gets its quota of prefects. Whether a girl takes responsibility or not does not necessarily depend upon academic ability. There are some taking office with tremendous vigour who would not have obtained a grammar-school place. [1]

9.10. Significant Points

But the following points seem to me to be as important as anything else that Miss Miles says in her book.

(1) "Alongside the academic subjects in a comprehensive school stands the vocational, practical and artistic work, for it is essential in such a school that all kinds of skill and activity be recognised. The aim of the comprehensive school is to educate people, not just the few who have academic ability and who will go to a university, but all people, to be able to play their part in society. They must have the skills necessary for the work that they are going to take up but they must also have the skills necessary for daily living; they must know through the senses as well as through the intellect, something of music, of literature, of art, of building and of other countries, and they must be able to share this knowledge with all their fellow citizens." [2]

(2) "Jobs for an unskilled proletariat are being eliminated by the advance of automation and of technology, and it is essential that our schools be adapted to meet the needs created by these developments. Schools are always at a disadvantage in social change because of the inbuilt conservatism which results from parents and teachers all having been through school themselves, and all being consciously or unconsciously affected by the education they themselves received twenty or more years ago. The comprehensive school is not tied to the past and its function is not to perpetuate outworn educational and social

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1. Ibid. p.50.
2. Ibid. p.16.

patterns, but to meet the needs of the most rapidly changing society we have ever known." [1]

(3) "The British tradition that each head teacher can decide on the curriculum and the organisation of each school allows for an immense variety ..... . There is no blueprint for a comprehensive school as such, and each school works out its own way of implementing the comprehensive idea and of providing genuine secondary education for all by putting at every child's disposal the full resources of a school." [2]

The fourth point that must be quoted has been made in a number of reports. It can be found in the Quebec report previously mentioned. It appears in the UNESCO report "Education in a Technological Society" and it has appeared in a number of American educational journals. It has become almost a platitude and so we tend to overlook the basic truth stated therein.

(4) "(Children) need an education which is not simply going to fill them up with factual knowledge, but which is going to help them develop the sort of minds, and the powers of perception, which will enable them to adapt to the world in which they will live in the future. The changes in scientific progress and in technology are now so rapid that much that is learnt at school will be out of date by the time the children go to work; therefore they must learn to be observant and to know how to learn, rather than just acquire knowledge." [3]

The Unesco report adds a little to this by reminding us that in our lifetime a man learning a trade was equipped for a lifetime and was even encouraged to arrange an identical training for his sons. Today politico-economic development enforces repeated changes of occupation within the space of a few years. In a country which educates most of its young people up to the age of 16 or 18 years, it is most important that the education given, particularly in later years, shall be appropriate. Otherwise large numbers may be prepared for a type of

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1. *Ibid. pp.16 and 17.*
2. *Ibid. pp.17 and 18.*
3. *Ibid. pp.40-42.*

life they will not be able to lead. That they may wish to receive inappropriate education and that this wish is gratified in no way sets the matter right. "If for instance in a country largely dependent on the mining of coal or the growing of wheat the great mass of the coming generation prefers to be educated to become small clerks or shopkeepers or poets, that country will be in grave danger of wrecking itself upon the reef of its excellent intentions." [1]

Here again then is seen clearly the need for vocational guidance - not just simply supplying teacher-psychologists to the large high schools as is presently being done in the Cape Province - but a nationally organised vocational guidance scheme fully equipped with the best statistical data as a basis for advising, guiding and directing children into correct educational paths.

9.11. Streaming

9.11.1 General

It is probable that enough has now been written of a typical comprehensive school, fortunately from a late and reliable source, to answer some of the questions which have been asked amongst educationists since the system was introduced into England and Wales. There is, however, the problem mentioned in paragraph 9.4. in which Conant is quoted as being of the opinion that ability grouping, subject by subject, is possible in comprehensive schools. This is a very important matter. In general, in South Africa, it is probably general custom to group on over-all ability rather than subject by subject ability. This certainly makes for easier administration but is typical of our practice of having schools curriculum-based rather than pupil-based and this is possibly the educational revolution which is stirring.

9.11.2. South African situation

Some indication of change was given by Mr. S.C. Heunis, at one time member of the Executive Committee of the Cape Provincial Council in charge of education, in a speech at Warrenton on 27th. February, 1970

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1. "Education in a Technological Society" U.N.E.S.C.O. 1950.

and reported in the Argus of that day. His basic arguments were that due (a) to a restricted curriculum at many schools and (b) the requirements for university entrance, many good students were being denied tertiary education at a university. He said that there should be more differentiation in the university admittance subjects. This is a matter for further discussion in a later chapter. It was introduced here to justify comments from overseas sources on the same matter.

9.11.3. Miss Miles's reaction

Miss Miles has concluded that very much research is necessary and that the whole question of streaming is tied up with the question of integration of the curriculum and the breaking down of the divisions between water-tight compartments containing the traditional subjects of study descended for the most part from university syllabuses. She remarks that the innate conservatism of the teaching profession together with tne arrangements for the training of teachers make it difficult to break down traditional attitudes and help teachers teach children rather than subjects.[1] There is undoubtedly a great need for further study of curricula. The actual curriculum offered at Mayfield and the current method of grouping pupils are given in appendices: 3,4,5 and 6.

9.12. The Swedish Comprehensive School

9.12.1. General

The diagram on page 413 gives a general picture of the Swedish school system which is due to be fully re-organised by the end of 1971. The re-organisation began in 1962. It will be seen from the diagram that there is a slightly different interpretation of the term comprehensive school. Compulsory schooling in Sweden is between the ages of 7 and 16 and the whole of this period is spent in a comprehensive school. This used not to be the case. Jonas Orring, in describing the system, enumerates a number of principles:

(a) "A vigorous and concentrated effort is being made to reduce or

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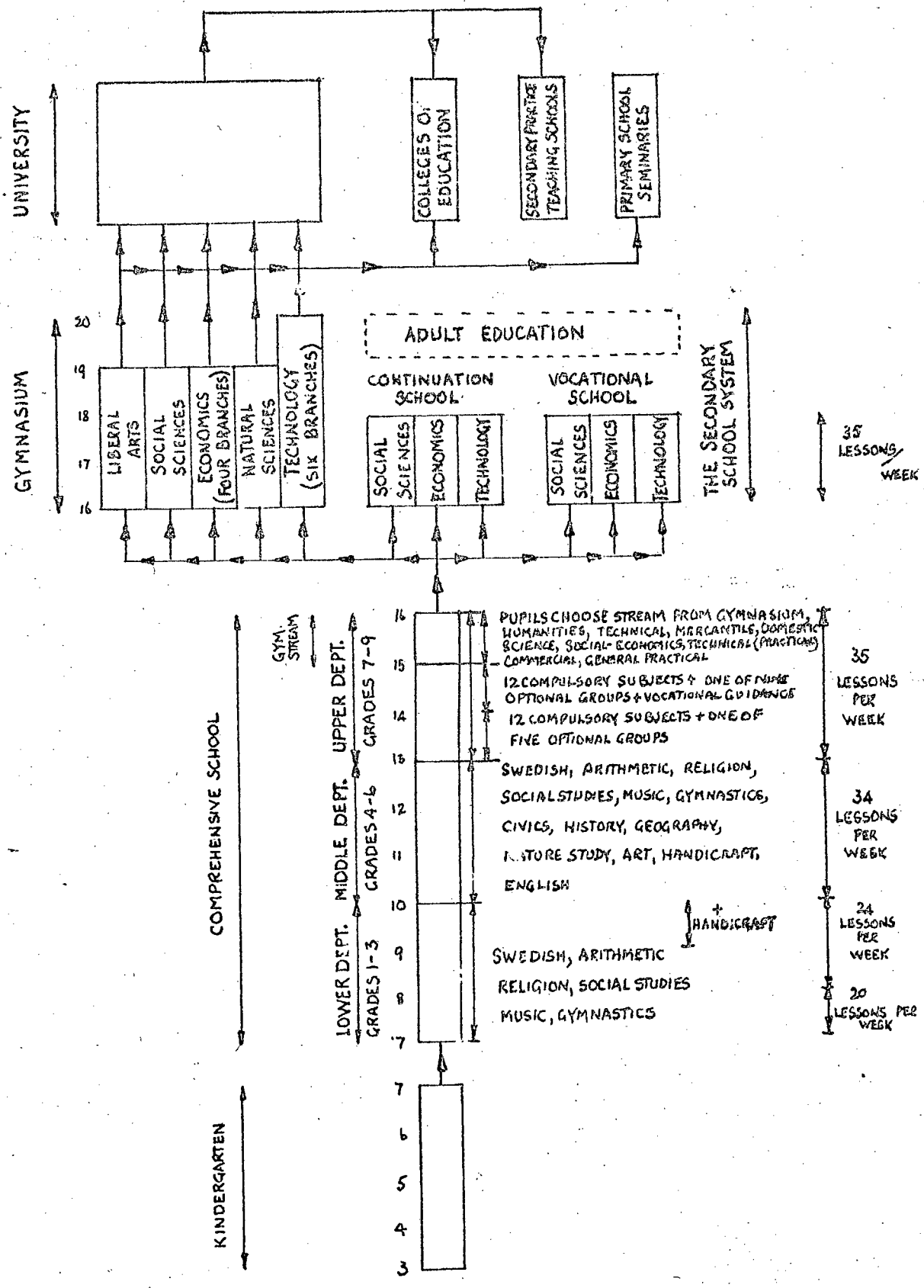
1. "Comprehensive Schooling" Op cit. p.73.

THE SWEDISH EDUCATIONAL SYSTEM

[THIS CHART HAS BEEN CONSTRUCTED ON THE BASIS PROVIDED BY SEVERAL SOURCES :-

1. JONAS ORRING "THE SCHOOL SYSTEM OF GENERAL EDUCATION IN SWEDEN."
2. SIXTEN MARKLUND AND PÄR SÖDEBERG "THE SWEDISH COMPREHENSIVE SCHOOL."
3. TORSTEN HUSEN "SCHOOL REFORM IN SWEDEN"
4. ULLA-BRITTA BRUUN "NURSERY SCHOOLS IN SWEDEN"
5. DAHLLÖF, ZETTERBUND AND ÖBERY "SECONDARY EDUCATION IN SWEDEN"]



break down as far as possible the boundaries between the different types of school. As part of this effort the different courses of study are being increasingly integrated and co-ordinated."

(b) "We want to eliminate all blind alleys. This means that we are trying to plan the different types of school for the same age levels in such a way that the pupils will be able without excessive difficulty to proceed further along the same course of study, or even to transfer to another course along somewhat different lines ."

(c) "It is our opinion that, in all types of school, greater attention should be paid to general education."

(d) "In direct connection with the above principle we are seeking deliberately to reduce specialisation at all stages for pupils up to the age of twenty, in favour of training that covers broader aspects of professional or working life, not having one individual profession or calling in view. This does not so far apply to professional training, but there is every indication that developments there, too, will follow the same lines."

(e) "We have found it necessary, in an ever-shrinking world, to extend and improve instruction in foreign languages. All children without exception will receive intruction in one foreign language. We are also seeking to achieve a more widespread knowledge of a second and a third foreign language over the country as a whole."

(f) "Co-education of boys and girls is the universal practice at all levels of school life." [1]

The comprehensive school consists of three three-year departments. In the lowest department, grades 1 - 3, all children are instructed by their class teacher and follow the same curriculum in each of the grades. The subjects are shown on the chart. The next department also consists of three grades and the pupils are given instruction by class teachers. In grade 4 English becomes a compulsory subject and is taught in

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1. Jonas Orring. "The School System of General Education in Sweden". The Swedish Institute. Stockholm 3. Sweden. pp. 1-4.

4 periods of one-half hour each using the modern approaches to direct method teaching. (This subject is compulsory in grades 4,5,6 and 7 but 80-85% of pupils continue it until the compulsory school leaving age of 16.) In these first two departments (i.e.) grades 1 - 6 there is no differentiation. This is to the age of 13 and in this respect is more or less the English and South African age pattern. The subjects studied in grades 4,5 and 6 are shown on the chart.

The upper department, also comprising three grades, 7 - 9, is the one which is most relevant to this study because it corresponds to the first three years of a South African high school course as arranged at present. Specialist teachers are used - those for academic subjects, vocational subjects, physical education and handicrafts. As far as it is possible classes from preceding departments are kept together for the compulsory subjects for grades 7 and 8. These compulsory subjects occupy 30 periods in grade 7 and 28 in grade 8. Thus we see the great stress on general education. In addition pupils choose an optional group of subjects for 5 hours per week in grade 7 and seven hours per week in grade 8. It appears that the optional groups are three in number. The first is really a study of German or French for these two years. The second group also includes the second foreign language but not to the same high standard. The third group is a practical one including either handicrafts or workshop practice and theory.

Streaming begins in earnest in the ninth grade in which there are nine streams. The choice of streams is left to the pupil and parent. A minimum of 12 pupils is required to make up a particular stream in any one school. There are five theoretical streams - gymnasium, humanities, theoretical technical, mercantile and social-economic - and four practical streams - general practical, practical technical, practical commercial and domestic science.[1] Vocational guidance is given before a pupil chooses his stream and in addition during the 8th grade

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1. Ibid. pp.6-9.

the pupil has to work for three weeks in practice in what he thinks will be his choice, to help him decide. It is understood that the employers' and the employees' organisations are very helpful in this regard.

Thus far the compulsory school period of nine years has been sketched and the salient points seem to be (1) the lack of specialisation until the period 13-16 years of age - and then only intensive in the last year. (2) The great stress placed on general education, particularly upon communication subjects.

9.12.2. Further education

Beyond the age of 16 there are two other types of schools to which students may go. About 35% of the pupils at the age of 16 proceed to a gymnasium (higher secondary school). Those following a liberal arts course, a social science course, one of the four branches of an economics course, or a natural science course, stay for three years. There are six technological courses offered which, in general, last for four years. Thereafter for specialist study students proceed to a university or to a teachers' training college. Those not qualifying for a gymnasium course proceed to a two-year course at a continuation school, if they so wish. The standard of these schools is not as high as the gymnasiums. The purpose is to give students a longer period in which to decide on their future occupation. It is possible in certain circumstances for them to transfer to a gymnasium.

There are three types of continuation schools, the social, the economic and the technical. The details are not of great concern to the present project but to illustrate the choice of subjects, which is of concern to the present argument, the tables on pages 417, 418, 419, and 420 are included.

All education, including the provision of textbooks, in the comprehensive and continuation schools and in the gymnasiums is free. [1]

9.13. Conclusion

This chapter is not intended to be a detailed study of the

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1. Ibid. pp. 10-12.

GYMNASIUM

NUMBER OF LESSONS PER WEEK IN THE SUBJECTS OFFERED

SUBJECT	HUMANITIES	SOCIAL SCIENCES	ECONOMICS		NATURAL SCIENCES	TECHNOLOGY		REMARKS
			WITH LANGUAGE	OTHERS		1-3	4	
SWEDISH	10	10	9	9	9	8		
MODERN LANGUAGES	30	25	30	21	18	12		
GENERAL LINGUISTICS *	3							LATIN ACCIDENCE → VOCABULARY, WORD FORMATION
HISTORY	8	8	4	4	6	4	-	
HISTORY OF MUSIC AND ART *	2	2			2			
RELIGION	3	3	2	2	2	2		
PHILOSOPHY *	2	2			2			
PSYCHOLOGY *	2	2	2	2	1		2[c]*	
CIVICS	10·5	10·5	8·5	8·5	5	5		INCLUDES GEOGRAPHY
LAW			2[b]	2				
ECONOMICS OF BUSINESS *			10	13			3	
OTHER ECONOMICS SUBJECTS				7				
MATHEMATICS	5[a]	11	5	11	15	15		
PHYSICS					10·5	10·5		INCLUDES NUCLEAR PHYSICS
CHEMISTRY					7	6·5		INCLUDES NUCLEAR + PHYSICAL CHEMISTRY
BIOLOGY					5			BIOCHEMICAL BASIS + GENETICS
NATURE STUDIES *	7	9	3[a]	3[a]				CHEMISTRY, PHYSICS, BIOLOGY, PHYSICAL GEOGRAPHY.
TECHNOLOGY *						11		
OTHER TECHNICAL SUBJECTS						11·5	30	
TYPEWRITING			4	3				
SHORT HAND			6					
MUSIC OR ART	2	2			2			
GYMNASTICS	8	8	7	7	8	7		
AVAILABLE (LECTURES, VISITS, INDIVIDUAL GUIDANCE)	3·5	3·5	3·5	3·5	3·5	3·5		
TOTAL	96	96	96	96	96	96	35	

KEY

a = FREE CHOICE BETWEEN TWO COURSES

b = MAY BE EXCHANGED FOR PRACTICAL SECRETARIAL WORK

c = ERGONOMICS = HUMAN ENGINEERING = BIOLOGY + PSYCHOLOGY + MANAGEMENT
RELIGION INCLUDES STUDY OF FOREIGN DENOMINATIONS

* = NEW OR RADICALLY REVISED SUBJECTS

FORM	LESSONS PER WEEK
1	34
2	32
3	30
4	35

NOTES

1. 1st FORM SUBJECTS, GENERALLY SPEAKING, SAME FOR ALL STUDENTS.
2. MATHEMATICS COMPULSORY – TWO COURSES OF DIFFERENT DEGREES OF DIFFICULTY.
3. TECHNOLOGY – A GENERAL SPECIFIC SUBJECT ENDING AT THIRD YEAR.
4. CHOICE BETWEEN MUSIC, ART AND DRAMA FOR SPECIAL AESTHETIC SUBJECT.
5. SPECIALISATION POSSIBLE WITHIN ART.
6. SOCIAL SPECIALISATION IS BY WAY OF A NEW SUBJECT – SOCIAL STUDIES.
7. CLASSICAL SPECIALISATION – 14 LESSONS LATIN + 8 GREEK – NO GENERAL LINGUISTICS – FEWER LESSONS IN MODERN LANGUAGES, CIVICS AND PSYCHOLOGY.
8. GYMNASIUM STUDENTS (EXCEPT TECHNICAL WHO TAKE 2) TAKE THREE MODERN LANGUAGES.

CONTINUATION SCHOOL (SOCIAL SCIENCES)

LESSONS / WEEK

SUBJECT	FIRST YEAR					SECOND YEAR					
	COMMON SUBJECTS	LANGUAGES	NATURAL SCIENCES	OPTIONAL SUBJECTS		COMMON SUBJECTS	LANGUAGES	NATURAL SCIENCES	SOCIAL SCIENCES	CONSUMER ECONOMICS	OPTIONAL SUBJECTS
SWEDISH	4					3					
ENGLISH [b]	3					3					
B-LANGUAGE [b+c]		3		3			4				3
C-LANGUAGE [c]		4		3			4				3
HISTORY	2					3					
RELIGION						2					
PSYCHOLOGY	2					2					
CIVICS	4								2		
SOCIAL STUDIES									6		
CONSUMPTION THEORY	2									6	
FAMILY THEORY						1					
MATHEMATICS [b]			3	3				3			3
PHYSICS			2					2·5			
CHEMISTRY			2					2·5		2	
BIOLOGY	2					2					
OFFICE TECHNIQUE						1					
TYPEWRITING				3							1-3
DOMESTIC SCIENCE [d]				3							3
TRAFFIC AND ENGINE THEORY											2
MUSIC	2/0 [e]			3							2
ART	0/2 [e]			3							2
HANDICRAFT				3							3
DRAMA				3							2
GYMNASTICS	3					2					
SPECIAL WORK						2					
LESSONS AVAILABLE	1					1					
TOTAL	25	7	7	3		22	8	8	8	8	5
TOTAL / WEEK	35					35					

NOTES AND KEY

AESTHETIC VARIANT MAY BE ARRANGED IN 2ND. YEAR.

b = GENERAL OR SPECIAL COURSE (ONLY IN 1st. YEAR IN MATHEMATICS)

C = B-LANGUAGE BEGUN IN COMPULSORY SCHOOL. C-LANGUAGE (GERMAN, FRENCH OR FINNISH)

d = COURSE IN DOMESTIC SCIENCE IS SAME IN BOTH YEARS.

e = CHOICE BETWEEN MUSIC AND ART.

CONTINUATION SCHOOL (ECONOMICS)
LESSONS / WEEK

SUBJECT	FIRST YEAR		SECOND YEAR					
	COMMON SUBJECTS	OPTIONAL SUBJECTS	COMMON SUBJECTS	LANGUAGES	MANAGEMENT	DISTRIBUTION	ADMINISTRATION	OPTIONAL SUBJECTS
SWEDISH	4		3					
ENGLISH[a]	3		3					
B-LANGUAGE[a,b]		3						4
C-LANGUAGE[b]		3						4
RELIGION			2					
PSYCHOLOGY	2							2
CIVICS	2		2					
CONSUMPTION THEORY[c]		2						2
MATHEMATICS[a]	3/0[d]	0/3	3/0[d]					0/3
ECONOMICS OF BUSINESS	9		4					
ACCOUNTING					6			
DISTRIBUTION						6		
ADMINISTRATION							6	
SWEDISH COMMERCIAL CORRESPONDENCE				2				
ENGLISH COMMERCIAL CORRESPONDENCE				2				
PRACTICAL SECRETARIAL WORK				2				
OFFICE TECHNIQUE[c]		3						3
TYPEWRITING[c]	3							2
SHORTHAND	0/3[d]	3/0	0/3[d]					3/0
ENGLISH SHORTHAND								3
TRAFFIC AND ENGINE THEORY								2
MUSIC[c]		2						1-2
ART[c]		2						1-2
GYMNASTICS	3		2					
SPECIAL WORK			2					
LESSONS AVAILABLE			1					
TOTAL	29	6	22	6	6	6	6	7
TOTAL / WEEK	35		35					

KEY

a = GENERAL OR SPECIAL COURSE (MATHEMATICS ONLY IN 1st YEAR).

b = B-LANGUAGE (GERMAN OR FRENCH) STUDIED AT COMPULSORY SCHOOL. C-LANGUAGE (BEGIN) IN GERMAN, FRENCH OR FINNISH.

c = COURSES IN CONSUMPTION THEORY, TYPEWRITING, MUSIC OR ART. ARE SAME IN BOTH YEARS. SOCIAL SCIENCE COURSE, COURSE IN OFFICE TECHNIQUE SAME IN BOTH YEARS.

d = CHOICE BETWEEN MATHEMATICS AND SHORTHAND.

CONTINUATION SCHOOL (TECHNOLOGY)

LESSONS/WEEK

SUBJECT	FIRST YEAR					SECOND YEAR				
	COMMON SUBJECTS	MACHINE	BUILDING	ELECTRICAL	CHEMICAL	COMMON SUBJECTS	MACHINE	BUILDING	ELECTRICAL	CHEMICAL
SWEDISH	4									
ENGLISH	3[bc]									
GERMAN	3[bc]									
FRENCH	3[bc]									
RELIGION						2				
CIVICS						2				
MATHEMATICS	6						2[d]	2[d]	4	2[d]
PHYSICS	4					3				
CHEMISTRY		2[e]	2[e]	2[e]	8					
ECONOMICS OF BUSINESS							2		2	2
ERGONOMICS		1				2				
GYMNASTICS	3					1				
TECHNICAL SUBJECTS[f]		13	13	13	7		21	23	19	21
TOTAL	20	15	15	15	15	10	25	25	25	25
TOTAL / WEEK	35					35				

THERE IS COORDINATED INSTRUCTION IN COMMON SUBJECTS AND COURSES WHEREVER POSSIBLE.

KEY.

b = CHOICE BETWEEN GERMAN AND FRENCH AS THIRD LANGUAGE.

c = GENERAL OR SPECIAL COURSE.

d = SAME COURSE FOR MECHANICAL, BUILDING AND CHEMICAL COURSES.

e = SAME COURSE FOR MECHANICAL, BUILDING AND ELECTRICAL COURSES.

f = TECHNICAL SUBJECTS AS FOLLOWS :-

MECHANICAL : MECHANICAL TECHNOLOGY, MECHANICAL CONSTRUCTION, ENERGY, PRODUCTION, ELECTROTECHNOLOGY FOR MECHANICAL STUDENTS.

BUILDING : BUILDING TECHNIQUES, BUILDING CONSTRUCTION, BUILDING PRODUCTION, HOUSE AND TOWN PLANNING.

ELECTRICAL : ELECTROTECHNOLOGY, THEORY OF ELECTRICITY, ELECTRONICS, TELECOMMUNICATIONS, ELECTRIC MOTORS, ELECTRICAL INSTALLATIONS, ELECTRIC POWER.

CHEMICAL : CHEMICAL TECHNOLOGY, PHYSICAL CHEMISTRY AND ANALYSIS, ORGANIC CHEMISTRY, BIOCHEMISTRY, CHEMICO-TECHNIQUE.

comprehensive school system but to point out certain features of the system which may have to be incorporated into the South African educational system, particularly in the Cape Province, if the system is to offer adequate opportunities for all pupils to reach their own individual ceiling. It is a widely accepted educational principle that every pupil must be encouraged to attain his own degree of excellence. This implies a much wider choice of subjects and considerable differentiation. It implies the building of bridges between courses for those who wish to change. All such implications will be discussed in the next chapter.

In the following chapter, too, other experiences of working in comprehensive schools will be quoted because of their relevance to the theme of this chapter. They will be found to support many of Margaret Miles' conclusions, which were given in detail in the present chapter because they were the latest available at the time of writing the chapter, and because Miss Miles is a recognised world authority on comprehensive schooling.

CHAPTER X

The Type (or Types) of School necessary in the Cape Province.

10.1. Introduction

In discussing the evolution of full-time vocational or vocationally-directed secondary education in the Cape Province it has been shown that the technical high schools and the housecraft high schools were originally industrial schools established to give training to the children of indigent parents and so help to solve the unemployment problem which was causing concern at that time, and provide a solution to the poor white problem which was causing degeneration in some sections of the population. As a result of this a stigma attached to these schools which is only now beginning to disappear. Because of this many parents refused to send their children to these schools despite the fact that the aptitudes and abilities of the children indicated that these were probably the right type of school for them.

The agricultural high school and the commercial high school developed later and suffered from no such stigma. Nevertheless because

of the opposition of the farmers themselves the agricultural schools did not grow into large schools until comparatively recent times, and even now, as will be shown, are not training a sufficiently large number of young people for farming activities. The commercial high schools are proving to be very popular now and the competition for places in them is intense. Even so, the number of pupils emerging from these schools is hopelessly insufficient to meet the demands of industry and commerce. This fact will also be demonstrated.

The tradition in the Cape Province for many years has favoured general, academic courses at schools. Professor M.C. Botha warned of this as far back as 1934. "Our education is characterised by an exaggerated intellectualism. And our children are crammed with so much intellectual book-learning that at the end of their school or even university career they are fit for little else than to impart to others what they themselves have learned from books. The ability to convert theory into practice, to act on their own initiative and to see things in their true perspective, is usually conspicuous by its absence." [1] The reasons for this preference for the academic tradition are given by Dr. E.G. Malherbe in his introductory chapter to "Education in South Africa, 1652-1922" [2] and may be summarised as follows:- In the 17th. century Dutch-Religious Education was transplanted from Holland to the Cape. A system of her own was being worked out in the Cape Province after one hundred and fifty years of independent adaptation when an English system was introduced. It may generally be said that, provided an educational system did not threaten the people's inherent love of liberty, their desire for self-government and their deep religious sense, it was accepted. The population on the whole desired education and rather than do without it, acceptance of any system without question was usual. The academic bias was strengthened by the

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1. Union Education Department. Report for 1933 and 1934. UG 46'35. p.8.
2. "Education in South Africa, 1652-1922." Op cit. p.8.

powerful influence on the Colony of Scottish predikants and schoolmasters. The influence of the latter was still widespread and powerful as recently as forty years ago. It is only in recent times that there has been any general interest in education, any questioning of existing systems, any enquiring as to the suitability of curricula and any seeking for the purpose behind these curricula.

Even now it is probably true to say that very many parents, particularly those in comfortable financial circumstances, prefer their children to have the same type of education that they themselves received, that is, the usual high school academic curriculum. They consider this to be in the best interests of their children. This is a natural desire and well-understood. What is now being questioned is whether the same formative values cannot be found in other curricula and if they can be, why so many children are being compelled to take subjects in which they are not very interested. Cannot the vocational needs of both pupils and society be met and the general purposes of education be served within one and the same educational institution?

In 1920 there was some re-organisation of secondary education in the Cape Province, inter alia, the recognition of the need to institute differentiated courses of secondary instruction in order to try and provide for the individual needs of pupils, but it is now being realised that this, important a step though it was, was not enough. Certain suggestions have been made. To examine these and problems related to them is the purpose of this chapter.

10.2. Statistics

10.2.1. Vocationally-directed Education

On 2nd. June, 1970, the total high school and secondary school pupil enrolment was 79 585 of whom 67 573 were in "academic" schools.

In technical high schools there were 4 513 pupils - 5.67% of the total enrolment.

For housecraft high schools the corresponding figures were 542 and 0.68%

For the commercial high schools the position was 4 088 pupils or 5.14%.

In agricultural high schools there were 861 pupils i.e. 1.08%.

There were 2 008 pupils in special secondary schools, 2.52% of the total high and secondary pupil enrolment.

Hence vocationally-directed education was given to 12 012 pupils or 15.09% of high and secondary school pupils. [1]

Before commenting on these statistics, it will be of interest to divide these between urban and rural areas. The urban areas used will be those given in the Statistical Year Books of the Bureau of Census and Statistics.

Urban Area	Total Enrolment	Vocational School Enrolment
Cape Town	21 604	2 075
Port Elizabeth	6 926	1 124
East London	4 240	1 331
Kimberley	2 848	1 050
Uitenhage	2 746	677
Paarl	3 071	435
Queenstown	1 343	-
Grahamstown	850	-
Worcester	2 158	720
Stellenbosch	2 799	103
Oudtshoorn	1 773	1 044
Upington	1 060	380
	51 428	8 939
"Rural Areas" (i.e.) the rest of the Province.	23 553	1 656

It should be noted that these figures are 1968 statistics which are the latest detailed statistics available and, therefore, the latest figures that could be used to divide urban from rural areas. They are, however, compatible with the figures for 1970 as is seen if the percentages are worked out. In urban areas the vocational school enrolments are 17.38% of the high and secondary school enrolments. In the "rural" areas the percentage is 7.03%. Combining the totals for 1968 there were 74 981 pupils in high and secondary school standards and 10 595 in vocational schools, so that the percentage here was 14.14

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1. All figures obtained from the Statistics Department of the Cape Education Department.

- slightly lower than in 1970. This is explained by an increase in enrolments in the P.W. Botha Technical High School in George which was a new school in 1968, by a slightly increased enrolment in most vocational schools and by increases in enrolments at the special secondary schools, these increases being relatively greater than those in the academic schools.

It is immediately obvious that the child in a rural area is at a disadvantage, compared with one in an urban area, as far as the opportunity of obtaining vocationally-directed education is concerned. There is, however, a more serious implication of the overall percentage of pupils receiving this type of education.

The table below gives, inter alia, a forecast of the labour position in the major sectors as given in the Economic Development Programme, to which reference was made in section 8.5. of chapter VIII.

Demand for White Labour (in 1 000s)

		1965	1969	1971
I	Agriculture	109.6	100.5	96.2
II	Mining	61.7	60.4	59.8
III	Manufacturing	288.4	328.9	351.3
IV	The services	779.9	888.0	947.6

The growth rates of III and IV should be noted, particularly that of IV which is characteristic of modern industrialised societies in that services such as commerce, banking, communications and transport expand very rapidly. [1]

"The economists are continually pointing out the need for technicians if our economy is to advance. The importance of technical training is such that it has been estimated in Canada that three-quarters of those attending school today will have to prepare themselves for technical and professional jobs." [2]

The Federated Chambers of Industry recently completed a man-power survey and reported at their annual conference that there was a shortfall of 100 000 workers and this would result in a 20% drop in gross targets

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1. See Biebuyck Report. Op cit. p.13.
2. Ibid. p.7.

in the next few years. In industry alone there were 63 000 jobs unfilled. [1]

The Associated Chambers of Commerce at their annual conference in September reported a 35 000 worker shortfall in commerce and allied services, and referred to the 20% estimated drop in the production programme in the manufacturing industry between 1968 and 1973. [2]

The deduction to be made is that the approximately 15% of our pupils who are receiving vocationally-directed education is far too few. The implications of providing suitable curricula for such pupils has been discussed in Chapter VIII. At this stage the necessity for a considerable increase in vocationally-directed education is the first point to be noted in this argument.

10.2.2. Standard VIII School Leavers

In 1968, in all types of schools in the Cape Province, there were 15 964 pupils in standard VIII classes and 8 912 in standard X classes. In the special secondary schools there were 303 in standard VIII classes and these, in the nature of their course, could proceed no further in full-time secondary education. In the ordinary secondary schools there were 483 pupils in standard VIII. (Those who proceed further and enter standard IX and X classes in high schools are reflected in the totals for those classes in the relevant year.) There seems to be no way of determining from the statistics alone what the number of pupils in these standard VIII classes is who are dissuaded from proceeding to the senior secondary course because of the fact that they have to go to another school. The implications of this change of school will include extra expense, a change of uniform, probably entering a hostel and making new friends, meeting new teachers and experiencing new teaching methods. The number involved, however, is likely to be small and so the matter need not be discussed further at this point.

The obviously very high drop-out in the high schools at the standard VIII level, though, is a cause for concern. The matter was

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1. Cape Times Report. 4th. November, 1970.
2. Ibid.

discussed in relation to technical schools in Chapter 11. In commercial high schools the drop-out is usually very small. To quote the example given in the Biebuyck Report, there were 415 pupils in standard V111 in the whole country. In 1964 there were 478 in standard 1X and in 1965, 460 pupils in standard X; there was, therefore a drop-out of only 18 pupils from standard 1X to standard X. [1] In the academic schools, then, there is a problem just as in the technical high schools and it is likely that the causes are the same in both types of schools. Some pupils have reached the limit of their ability; others have not the ability to proceed further with the subjects they are studying and others have no interest in the course upon which they are engaged. There will be some who are compelled to go to work because of economic circumstances in the home. There will be a group who desire to work in order to gain some measure of independence.

There is little to be done for those pupils who reach their ceiling at the standard V111 level except to make sure that their course up to that standard has been suited to their aptitudes. Where economic conditions in the home are poor, it would appear that sufficient financial aid should be provided by the State to ensure that children with the requisite ability proceed as far with their education as their potential permits. This surely is in the national interest. The group of pupils who leave school at the earliest opportunity in order to secure a measure of financial independence are in need of wise guidance to show them the folly of this procedure if they are able to benefit by further education. So many of these are compelled much later to return to part-time classes in order to improve their qualifications in the hope of bettering their financial position.

The problem of pupils leaving school because of following unsuitable courses is quite another question. Margaret Miles' experience with this problem was given in section 9.9.(a) of Chapter 1X. Her findings are confirmed by David Rubenstein and Brian Simon. They

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1. Biebuyck Report. Op cit. p.10.

point out that in 1953 there were one million pupils in England and Wales in secondary modern schools. This means that at the age of 11+ they had not been selected for admission to secondary grammar or secondary technical schools. Such pupils were not supposed to be encouraged to enter for external examinations. Nevertheless by 1962, 36 000 of this type of pupils were entering 'O' level examinations of the General Certificate of Education. Many with an intelligence quotient of 100 or less were gaining five or six passes and by 1966, 55 000 of these pupils were entering for external examinations, including then the Certificate of Secondary Education examinations introduced in 1965.[1] Further support for this opinion is gained from a report of the Incorporated Association of Assistant Masters. "One member, now in a young and vigorous comprehensive school, writes, 'The comprehensive school is unlikely to better the standards of the better grammar school but it is likely to equal them, and gives a far wider general education to its pupils than the average grammar school can hope to.' "[2] (It must be stated here that this report does not necessarily reflect the opinion of the Association as a whole, but is compiled from the reports sent in by members working in comprehensive schools, many of whom have had experience in grammar schools.) Although it is not the practice in the Cape Province to select students for high schools (at least where there is no very intense competition for places), the following warning from the same report has a bearing on the subject being discussed. "It is the considered opinion of the former grammar school masters here that the comprehensive system does not lead to 'dilution' as is so frequently claimed. Children of high ability, we are sure, would not suffer by the ending of segregation, but a great many other children would benefit by their presence within the school."[3] The report goes on, "Our members are agreed that the boys who were not

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1. Rubenstein and Simon. "The Evolution of the Comprehensive School, 1926-1966." London. Routledge and Kegan Paul. 1969. pp.54-57.
2. The Incorporated Association of Assistant Masters. "Teaching in Comprehensive Schools." A Second Report. Cambridge. The University Press. 1967. p.12.
3. Ibid. p.12.

'high-fliers' and who would otherwise be in the C form or D form of a grammar school do better in a comprehensive school. A representative opinion is: 'The lower range of selective intake are the main beneficiaries of the greater range of subjects available from the fourth form onwards and of the possibility of combining G.C.E. and C.S.E. subjects. There is a greater tendency for teachers to adjust techniques and academic objectives more closely to the abilities of the pupils than in grammar schools'." [1] Reading yet further, it appears that the members think that the comprehensive school can do more for the able secondary modern boy who would not have been selected for a grammar school. "For the boy of the A form in a modern school, the comprehensive school is God's gift. He has the full opportunity of a G.C.E. course to 'A' level should he show any talent for it. If not, he has a wider range of 'O' levels and C.S.E." [2] Another school reported that one-third of its sixth form pupils were from secondary modern school material and that one-third of the university places were won by such pupils. [3]

It is possible to quote more such reports. The object, however, is not to make out a case for the comprehensive school. That may evolve. It is to make a second point, that insufficient attention has been given in the past to the particular needs of the standard VIII school leavers, and for that matter, to the widely differing abilities of our pupils.

10.3. Differentiation

10.3.1. General

In Chapter IX various references were made to the necessity for differentiated courses in secondary education and in Chapter 1, Dr.Botha's definition of differentiation, "The right child receiving the right education from the right teacher in the right type of school" was given. Later in the report in which this definition occurs, he had more to say about differentiation. Some of this will sound very modern despite the

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1. Ibid. p.13.
2. Ibid. p.13.
3. Ibid. p.13.

fact that it was written thirty-two years ago. He thought that the "purely literary secondary education" should be limited to an intellectual élite and that high standards and rigid requirements for university entrance should be maintained. Pupils of less than average ability should be given a specially adapted education at the age of 13 or 14 years. He explained that this did not mean less education. In fact it would probably entail a longer school life under more expert teachers in order that they may attain to the maximum development of their potentialities.

"The child of high intelligence", he wrote, "will easily survive and compensate for the short comings of an unsuitable school, but the child of less innate ability is likely to suffer permanent spiritual damage. Competing against the more able he is likely to lose self-respect, become habituated to failure and accept as a matter of course his own mediocrity. Education should place a premium on the development of qualities such as initiative, readiness to undertake any or all kinds of work, thriftiness and a sense of personal responsibility.

No nation can consist exclusively of professional men and public servants. If our educational system during the last century had remembered this we should, as a result of wiser selection and more efficient training, today have had a larger number of capable farmers, we should have played our proper part in commerce and industry, we should have had no need to import skilled labour from overseas and we should even have had less reason to fear the competition of the non-European on the labour market." [1]

Professor Botha drew attention to factors about which we have now to be concerned. He pointed out the difficulties of establishing and conducting suitably different schools, or classes, for children of less than average ability because of the attitude of parents, rival educational and social theories, sparsity of population and

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1. 1938 Report of the Union Education Department. Op cit. p.13.

considerations of cost. He thought that tinkering with the present curricula would not achieve the purpose and that there was no doubt whatsoever that the solution of the problem would be much facilitated by a system of more efficient co-ordination of education. [1]

It was previously mentioned that the National Advisory Education Council was constituted in terms of Act No. 86 of 1962 and its existence confirmed by Act No. 39 of 1967. The purpose of this council, as defined in Article 4(3) of the latter Act, is to advise the Minister generally in regard to the general policy that should be followed in education. The Council used the opportunity provided by the provisions of the Act to undertake the long-felt need for a re-planning and re-orientation of the educational needs of the Republic. For this purpose a number of committees were named. Two of these - the Steyn Committee and the Biebuyck Committee - have been very frequently quoted in this thesis. One committee, whose report is not available yet, is that on Differentiated Education and Guidance. It has been possible, however, to sense the general trend of opinion and since this will have a considerable bearing on the type or types of schools to be provided, this will become the third point to be considered.

10.3.2. <u>The Junior Secondary Course</u>

It would appear to be reasonably certain that, as a general policy, the secondary school course will be of six years' duration, instead of the present five, and that it will be divided into a junior secondary course comprising standards V, VI and VII and a senior secondary course which will include the present standards VIII, IX and X. This does not necessarily imply that the standard V pupils will be removed from their primary schools - at any rate not immediately. The accommodation problem alone would inhibit that procedure. It does mean, however, that the junior secondary course will be begun in standard V, will be of a general, formative character for at least two of the three years with no attempt at differentiation in subjects and courses in these two years, and will be exploratory in nature. The subjects will certainly

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1. Ibid. p.13.

include the two official languages, general mathematics, general science, social studies (history and geography) and some creative occupations - art, woodwork, craftwork and needlework as examples. Emphasis as indicated above, will be placed on attempting to determine the aptitudes, abilities, potentialities and interests of the pupils. These may be more intensively studied by some slight measure of differentiation via subject choices in the standard VII year. It is possible to foresee some problems here. The age of the average child in standard V is 12+. At the end of the normal junior secondary course it will be 15+ years. Assuming that all average children will stay at school at least until the minimum compulsory school leaving age, they will all receive at least one year of the senior secondary course. This course is likely to be differentiated in respect of elective subjects and levels of subjects. Pupils who leave after completing standard VIII will benefit, therefore, by only one year of this type of education and, at any rate in technical, commercial and agricultural courses, this is probably not going to be sufficient. This situation presents a challenge to teachers in particular, and to educationalists in general, to see that syllabuses, methods and instruction be sufficiently interesting and differentiated in method and level to give some taste of success to the pupils, so that they show no desire to leave school at this stage.

10.3.3. <u>The Senior Secondary (Matriculation Exemption) Course</u>

It has been indicated in the preceding paragraph that the senior secondary course is likely to be differentiated in respect of subjects that may be taken and in the level of these subjects. To deal first with the matriculation exemption examination, about which some measure of agreement has been reached, though not yet finality, the table on page 434 shows a possible scheme, using only subjects offered at present in Cape Provincial schools. This scheme, it must be emphasised, is not the one tentatively proposed by the Joint Matriculation Board, nor is it necessarily one proposed by any provincial education department. The one which will be used by the Joint Matriculation Board is likely to be made known only after their January 1971 meeting.

GROUP I OFFICIAL LANGUAGES	GROUP II MATHEMATICS	GROUP III OTHER LANGUAGES	GROUP IV NATURAL SCIENCES	GROUP V HUMAN SCIENCES	GROUP VI APPLIED SCIENES: PRACT SUBJECTS
1. ADVANCED LEVEL AFRIKAANS ENGLISH 2. ORDINARY LEVEL AFRIKAANS ENGLISH	1. ADVANCED LEVEL ACCOUNTANCY MATHEMATICS 2. ORDINARY LEVEL ACCOUNTANCY MATHEMATICS	1. ADVANCED LEVEL FRENCH GERMAN GREEK HEBREW ITALIAN LATIN SOUTHERN SOTHO TSWANA 2. ORDINARY LEVEL FRENCH GERMAN GREEK HEBREW ITALIAN LATIN SOUTHERN SOTHO TSWANA	1. ADVANCED LEVEL BIOLOGY CHEMISTRY PHYSICS PHYSICAL SCIENCE PHYSIOLOGY 2. ORDINARY LEVEL BIOLOGY PHYSICAL SCIENCE PHYSIOLOGY	1. ADVANCED LEVEL COMMERCE ECONOMICS GEOGRAPHY HISTORY 2. ORDINARY LEVEL GEOGRAPHY HISTORY LITERATURE/LETTERKUNDE	1. ADVANCED LEVEL AGRICULTURAL ECONOMICS AGRICULTURE APPLIED MECHANICS ART COMMERCIAL MATHEMATICS HOME ECONOMICS MERCANTILE LAW TECHNICAL DRAWING + TRADE THEORY AND WORKSHOP PRACTICE * 2. ORDINARY LEVEL AGRICULTURAL ECONOMICS AGRICULTURE ART COOKERY AND NUTRITION HOME ECONOMICS INSTITUTIONAL MANAGEMENT METALWORK MOTHERCRAFT NEEDLEWORK AND DRESSMAKING SHORTHAND/SNELSKRIF TECHNICAL DRAWING + TRADE THEORY AND WORKSHOP PRACTICE * TYPEWRITING WOODWORK

+ MAY REPLACE A SUBJECT IN GROUP V

* ACCORDING TO TRADE LEARNED.

However, the scheme shown on page 434 will illustrate the curricular principles upon which the matriculation exemption will probably be based.

There are six groups of subjects. Group 1 contains only the two official languages of the Republic. It is a compulsory group and the minimum requirement in this group is that one language must be passed on the advanced level and the other on the ordinary level. A pupil may offer both languages on the advanced level. There are five other groups in each of which there are subjects on advanced and ordinary levels. The general requirement will be the passing of at least three subjects on the advanced level and three on the ordinary level. This means that, apart from the "first language", at least two other subjects have to be passed on the advanced level and these may be selected, together with the subjects on the ordinary level, from any other three groups, not more than two subjects being chosen from a group. The 'O' level is likely to be lower than the present standard X level and the 'A' level higher.

Considering first the technical high schools and noting the fact that technical drawing may be considered as a group V subject if desired, it would appear that a possible grouping would be –

Afrikaans A, English O, Mathematics O, Physical Science O, Technical Drawing A and Trade Theory and Workshop Practice A.

Such a grouping would suit the average pupil in standard X but would not, one supposes, be accepted freely by university engineering faculties. These would certainly prefer to see the Mathematics A and Physical Science A on the certificate. On the other hand the colleges for advanced technical education would probably accept this for entrance to a technician's course and it would certainly be sufficient to proceed to the advanced technical certificate courses for apprentices. It is possible to see, then, the working of differentiation through levels of subjects.

With the introduction of these two levels in a number of subjects, it will be necessary to re-consider the syllabuses and this will almost

certainly be done on an inter-departmental basis. Some doubts have already been expressed about the contents of the present syllabuses in physical science. It is thought by many teachers that the present senior secondary physical science course is too difficult for those pupils who do not propose to enter a science faculty of a university. The new scheme may present the opportunity to bring in an ordinary level syllabus more in line with the needs of "non-scientists" and perhaps offering alternative sections to suit varying needs of groups of pupils. For example, the boys in a technical high school need rather more stress on mechanics, heat, magnetism and electricity. These aspects should be considered by syllabus committees who have, perhaps, been too heavily influenced in the last few years by the demands for university entrance, rather than by the needs of the majority of pupils who do not pursue specialist tertiary studies.

If the curriculum of the housecraft high school is considered, it will be seen that the girls following the normal curriculum will still not be able to qualify for matriculation exemption. The reason is that the physiology syllabus which they follow at present is not even of the ordinary level standard. They do not follow a mathematics course or a third language course. Hence they cannot select subjects from the three groups required in addition to group 1. This position, too, will require careful consideration by the syllabus committees although it is to be remembered that most of the girls attending these schools are not university material. The solution may be to introduce the physiology O course in these schools. The course might then comprise -

Afrikaans A, commerce A, home economics A, English O, physiology O, and one of the skill subjects like needlework and dressmaking.

This would enable the few brighter pupils to gain matriculation exemption, which they cannot at present.

No difficulty is envisaged for pupils from commercial high schools who wish to gain matriculation exemption. A typical course might be -

English A, Afrikaans O, mathematics O, commerce A, accountancy A or O, mercantile law A.

Similarly there would appear to be no difficulties in the way of pupils from agricultural high schools. Their course might be –

Afrikaans A, English O, mathematics O, physical science O, agriculture A, agricultural economics A.

There are, of course, other options for those who, for example, prefer mathematics to agricultural economics.

An alternative grouping of subjects which is likely to find much support is shown in the table on page 438. It will be seen that the mathematics group has been combined with the natural sciences group to form group 2 and thus the number of groups is reduced to five. It will be noticed that mathematics may be used as a group 5 subject and technical drawing as a subject in either group 2, 4 or 5. Unless regulations are made to prevent it, it will be possible for a technical high school pupil to take a matriculation course without mathematics. Such a course would be –

Afrikaans A, applied mechanics A, trade theory and workshop practice A, English O, physical science O and technical drawing O.

This would not be desirable. Mathematics to at least O level is a necessity.

Under the group 5 subjects on page 438 or group VI on page 434 it will be seen that woodwork and metalwork are O level subjects. It has already been indicated that most technicians are expected to come from the ordinary academic schools. A compulsory subject in engineering technicians' courses is workshop technology and it is felt that with this in view and the fact that they will be dealing with engineering practice in their normal working lives, it would be a wise move to introduce these subjects at A as well as at O level. This would ensure a higher standard in the drawing and technology portions of the senior secondary course which would be of great benefit to these pupils and possibly, too, to those proceeding to university engineering and allied courses.

Thus, so far as matriculation exemption is concerned, there would appear to be a great deal of merit in the schemes that have been suggested and it may well be that university faculties will be able to

1 OFFICIAL LANGUAGES	2. MATHEMATICS AND NATURAL SCIENCES	3. OTHER LANGUAGES	4. HUMAN SCIENCES	5. APPLIED SCIENCES AND PRACTICAL SUBJECTS
1. ADVANCED LEVEL AFRIKAANS ENGLISH 2. ORDINARY LEVEL AFRIKAANS ENGLISH	1. ADVANCED LEVEL ACCOUNTANCY BIOLOGY CHEMISTRY ✓MATHEMATICS PHYSICS PHYSICAL SCIENCE PHYSIOLOGY 2. ORDINARY LEVEL ACCOUNTANCY BIOLOGY ✓MATHEMATICS PHYSICAL SCIENCE PHYSIOLOGY	1. ADVANCED LEVEL FRENCH GERMAN GREEK HEBREW ITALIAN LATIN SOUTHERN SOTHO TSWANA 2. ORDINARY LEVEL ANY OF THE ABOVE FOR WHICH THERE IS A DEMAND.	1. ADVANCED LEVEL COMMERCE ECONOMICS GEOGRAPHY HISTORY 2. ORDINARY LEVEL GEOGRAPHY HISTORY LETTERKUNDE LITERATURE	1. ADVANCED LEVEL AGRICULTURAL ECONOMICS AGRICULTURE APPLIED MECHANICS ART COMMERCIAL MATHEMATICS HOME ECONOMICS MERCANTILE LAW + TECHNICAL DRAWING * TRADE THEORY AND WORKSHOP PRACTICE 2. ORDINARY LEVEL AGRICULTURAL ECONOMICS AGRICULTURE ART COOKERY AND NUTRITION HOME ECONOMICS INSTITUTIONAL MANAGEMENT METALWORK MOTHERCRAFT NEEDLEWORK AND DRESSMAKING SHORTHAND / SNELSKRIF + TECHNICAL DRAWING * TRADE THEORY AND WORKSHOP PRACTICE TYPEWRITING WOODWORK

✓ MAY REPLACE A GROUP 5 SUBJECT + MAY REPLACE A SUBJECT IN GROUPS 2, 4 AND 5 * ACCORDING TO TRADE LEARNED.

select their first-year students with more reliable information at their disposal than heretofore.

There seems to be one other point to consider. Is the subject choice for matriculation exemption candidates wide enough? For the sake of comparison, the subjects offered at Mayfield School in London on the advanced level were examined. (To gain admission to a university in England and Wales, three good 'A' level passes at the General Certificate of Education examination are usually required.[1]) The subjects offered are:Religious knowledge, English, French, Italian, German, Spanish, Latin, history, geography, mathematics (pure and applied), pure mathematics, applied mathematics, physics, chemistry, biology, geology, music, art, dress, housecraft. (It must be mentioned that the girls do not spend all their time on an intensive study of these three or four subjects. They are required to balance their course. Thus if their studies are linguistic at least one option must be science and mathematics).[2] It is seen, then, that subjects offered do not vary much from those in the table on pages 434 and 438 and, in fact, from the full list of subjects that the Joint Matriculation Board are likely to suggest, there is no variation of any consequence. (It must be remembered, too that before proceeding to the A level courses at an English school, pupils are expected to have taken at least five and probably more 'O' level subjects and obtained good symbols.) All points considered, the curricula possible from the subjects shown in the table appear to provide a satisfactory foundation for further work at a university.

10.3.4. The Senior Secondary (General) Course

There appears to be no certainty about this course. It can reasonably be assumed that it will be a six-subject external examination course plus the usual non-examination subjects. It is also a fair

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1. See Appendices 4 and 5.
2. Ibid.

assumption that both official languages will be required as subjects. It is also a fair assumption that there will be some grouping of subjects according to the nature of the course to be followed. This grouping for the sake of administrative ease of control, may well follow the grouping already discussed in the previous section of this chapter. The question that is not yet answered is that of the level of the syllabuses. As already indicated, the ordinary level for matriculation purposes is likely to be lower than the present standard X level. There was a time some three or four years ago, when the Joint Matriculation Board was making tentative enquiries of the various education departments about their reactions to a differentiated system of examinations, when it was suggested that the ordinary level might be the present standard IX syllabus requirement. This was before the new basic syllabuses had been drafted. In certain subjects - mathematics, physiology, physical science, biology, to quote but a few - this might well be a sufficiently high standard for school leaving purposes, because the present basic syllabuses are to a higher standard than those previously used, at least that is the impression gained by studying the syllabuses. Much, of course, depends on the standard and type of examination paper that is set. This is always true and explains why it is necessary to study examination papers, memoranda for marking the papers, and some specimen answers, in conjunction with any syllabus, before attempting to compare standards. But assuming that the ordinary level examinations require standards comparable with the present standard IX examinations, our standards would be comparable with English O level standards and this would probably be adequate for many purposes.

It might also be expected that the examination in the mother tongue be of the present higher level. This would not be unreasonable. The difficulty that immediately becomes apparent is that there would then have to be three levels of examination papers in the two official languages. The proposed advanced level, the present A level and the proposed O level. This might not prove acceptable to the authorities,

although in the Transvaal Education Department there is a two-stream standard X course, a matriculation stream and a school leaving stream, and the Department of National Education [1] has M and T streams in its technical high school courses. The administrative problems involved, therefore, cannot be insuperable.

The next question which arises is whether or not a Senior Certificate as such will be issued, as at present, or whether a statement of attainment will be considered as adequate. To compare again with the English system, the General Certificate of Education regulations do not prescribe a number of subjects to be passed or a grouping of subjects. Certificates issued indicate the subjects taken and the symbols obtained. This holds for both advanced and ordinary levels. Ordinary level examinations are normally taken when pupils are 16 years of age and advanced levels two years later. The General Certificate of Education is granted by eight examining bodies, most of them connected with a university. [2]

The Certificate of Secondary Education is intended for children of about average ability for their age group. The examinations are normally written after five years of secondary education. Any number of subjects may be taken. There are three ways in which these examinations are set. The first is by means of external examinations set on syllabuses published by Regional Boards. The second method is by external examinations set on syllabuses drawn up by individual schools or groups of schools and approved by the Regional Boards concerned. The third method is by means of examinations set and marked internally by either individual schools or by groups of schools and moderated by Regional Boards. Course work is taken into account; objective testing, project work and oral examining are also features of the examinations.

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1. *Since November 1st, 1970, the Department of Higher Education has re-combined with the Department of Cultural Affairs to form the Department of National Education.*
2. *Interview with Mr. Champkin. London University. A and O level Examinations Board. 26th. May, 1967.*

No candidate is said to have passed or failed. Results are graded 1 to 5, grade 1 being comparable in standard with an 'O' level G.C.E. pass. Grade 5 represents a standard just below average. Pupils who fail are ungraded. All candidates are informed of their results but only those who have gained at least one grade 4 receive certificates showing the graded results.

Control of C.S.E. is in the hands of serving teachers sitting on one of the fourteen regional boards. [1]

In both systems discussed above it is left to employers to decide on what entrance qualifications they require of their employees. It would appear that a similar system will be introduced in South Africa for school leavers who decide not to attempt the matriculation examination. Certificates of attainment might be issued to candidates who enter for the examinations at the end of the senior secondary course. These would indicate subjects attempted and symbols attained. Such a system already exists for pupils who leave school at standard VI, VII and IX level. A footnote indicates whether the pupil has passed the standard as a whole.

10.3.5. Other Aspects of Differentiation

In 1955, at the Inspectors' Conference of the Cape Education Department, Dr. E.L.G. Schnell presented a paper entitled "Differentiated Education for the Various Ability Groups in the Junior Secondary School". In the early part of the paper he gave a general picture of what was understood by differentiation and something of the history of what had been done in the United States of America in their comprehensive or multi-lateral type of school and in England in their tri-partite system of grammar, technical and secondary modern schools. In this way he indicated that differentiation is possible by using separate schools or separate courses within a school. [2]

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1. *The Certificate of Secondary Education. Reports on Education. London. Department of Education and Science. June 1968.*
2. *E.L.G. Schnell. "Differentiated Education for the Various Ability Groups in the Junior Secondary School." pp. 1-13 (original typed script) File L 13/0/12/2. Cape Education Department.*

In the second part of his paper he approached the problem from first principles and suggested that differentiation could be dealt with under four headings, namely, differentiation in tempo, quantitative differentiation, qualitative differentiation and differentiation in method.

He suggested that differentiation in tempo was the conventional form and that by its use the clever child advanced and the duller child was retarded. He deplored the practice of promoting children by age rather than by attainment and suggested that retardation to give a pupil a chance of consolidating a limited field and obtaining some certificate was a better procedure. He also suggested that to accelerate clever children, naturally within reasonable limits, was better than keeping them back in a class to proceed at the speed of the average child. [1]

In large schools the problem is not so difficult as in small schools, if this method of differentiation is used. It may easily be possible to have a number of classes based on ability groups and require more work and even more subjects from the best class than from the others. In small schools this ability grouping has to take place inside a class, the best group being expected to do more work than the other groups. In large schools, too, it may be possible to form ability classes for different subjects, that is, the A group in Afrikaans would not necessarily have the same members as the A group for mathematics, as an example. In small schools such a procedure is out of the question. In private schools "setting" is used quite extensively.

This type of differentiation, then, is most easily applied in the large school.

The next type of differentiation suggested by Dr. Schnell was 'quantitative differentiation' which means that more is expected of the brighter pupils and less of the duller. This might take the form of an enriched syllabus for the clever pupils and an attenuated one for the less able. It might also be interpreted as more work for the able

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1. Ibid. pp. 14 and 15.

and less work for the duller pupils - which is not much different from the acceleration and retardation discussed in the previous method. "A little reflection," writes Dr. Schnell, "soon shows how nonsensical this is. It is the superior pupil who needs fewer examples to establish a process and the duller pupil who needs more repetitive work to master the same process.

In the content subjects alone does there appear to be a little scope for quantitative differentiation. In subjects such as history and geography a more intensive study of the same field may be expected of the brighter pupils and a less intensive study of the weaker pupils. .....

I would suggest a further investigation into the feasibility of quantitative enrichment or attenuation, with the proviso that the express purpose be adaptation of the syllabus to the capabilities of the various ability groups." [1]

Before commenting on this it will be as well to look at the next type of differentiation, "qualitative differentiation", because these have something in common. Qualitative differentiation is capable of two interpretations:-

(i) differentiation in difficulty - which offers only a limited scope and in a few subjects only. As an example, in mathematics the same type of problem could be set but with more difficult figures for some pupils, or more difficult problems could be set for the more able pupils. In most subjects, however, it is almost impossible to differentiate according to presumed difficulty;

(ii) differentiation in terms of purpose - for what specific purpose is the pupil being educated (in addition, of course, to the general educational purpose).? Is the child being educated for an engineering career via a university,or for a career in commerce, or agriculture? [2] *This should affect the content of the compulsory subjects.*

Now if these two methods of differentiation are taken together,

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1. *Ibid. pp. 15 and 16.*
2. *Ibid. pp. 16 and 17.*

the reason for the introduction of advanced levels and ordinary levels is readily seen. Again, however, the point must be made that to give advanced and ordinary levels in the compulsory subjects alone, demands a sufficient number of pupils to make an economic use of specialist teachers possible. This again implies large schools.

The fourth type of differentiation cited by Dr. Schnell was 'differentiation in method'. He points out that it is in the sphere of method that the greatest promise of effective differentiation is held out and for the reason that there are, broadly speaking, two aspects of education - the adjustment of the individual to his social and natural environment and the development of the individual psyche. This will not be further discussed here because it was dealt with in Chapter Vlll. Compulsory education coupled with discipline at school, together with the effective social and economic sanctions of a civilised community, "demands a certain measure of authoritarian teaching - drill in fundamentals, punishment in various forms and an insistence that certain minima be mastered. Our normal and superior pupils usually acquire the minima demanded by society without difficulty. It is the dull-normal pupil who requires some compulsion and who responds best to the 'drill' approach. Of course, other means, such as the arousing of interest and the inculcation of a sense of duty are infinitely preferable, and, if sufficiently effective in making compulsion unnecesaary, so much the better. But it will remain true that, in the main, the kind of education needed for this type is 'drill' - the acquisition of certain fundamentals and consolidation in a limited field." [1]

Dr. Schnell then went on to discuss the gifted pupil for whom the acquisition of the certain minima of knowledge or skills is incidental in the wider process of developing his potentialities and of giving free rein to his innate urge to utilise to the full the ability with which he is endowed. He suggested that the free play of his initiative and creative ability together with the discipline

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1. Ibid. pp. 17 and 18.

inherent in the subject matter, the organisation of his learning material - the discipline of logical reasoning, of a high degree of accuracy and of pleasant and lucid presentation, is the method or type of education best suited to him. For him the type of education is that which will best promote intellectual, moral and spiritual development. From these pupils society draws its leaders and it is necessary to develop their vision, initiative, perseverance, ambition and vitality. They need to be trained to acquire what subject-matter they need efficiently and economically. They need a method which permits them to educate themselves.

In between these two extremes - the dull-normal and the gifted pupils - there has to be a judicious blending of authoritarian teaching and individual discovery and self-activity. [1] *Again the implications of method differentiation, to be really effective, suggest ability groups and hence large schools.*

10.4. Size of Schools

If all that has been written in this chapter about differentiation in education is considered, it will be seen that to be really effective there will have to be in each standard a minimum of three ability groups and if these groups are to be economical as far as specialist teacher-use is concerned, each group should contain between twenty and twenty five pupils. This would indicate that schools would be of at least 450 pupils.

If now it is desired to permit of a reasonable range of elective subjects it would appear that this number of pupils is too small, especially in the case of co-educational schools. Even in the junior secondary course, if some selection is allowed in standard VII, seventy five pupils divided, say, equally between the sexes, will not permit of a wide range of elective subjects and the study of some elective subjects, for example, a third language, technical drawing or trade theory certainly should not start later than standard VII.

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1. Ibid. pp. 18 and 19.

These considerations alone would suggest that the number proposed by Conant and arrived at by his experience of American high schools i.e. 750 as a minimum is correct. This would indicate a five class entry (if thirty pupils is acceptable in the case of standards V1 and V11) and assuming no drop-outs after standard V111. This number would probably allow for commercial, academic and home economics options. It would certainly not allow for trade options of the type found in technical high schools and special secondary schools or of agricultural electives as found in the agricultural high schools, but these have been deliberately excluded for reasons now to be given.

To deal with the most straightforward case first, it is obvious that agricultural high school education must be provided where a reasonably sized and suitable farm is available. Because of the nature of the course, which necessarily includes much practical work and ipso facto a long school day, it would be administratively very difficult to combine this type of school with any other. It has been explained in Chapter V that emphasis is placed on aspects of the course which suit the district in which the school is situated. Hence the choice of subjects is not likely to be very great. These schools may well be efficiently run on a lesser number of pupils than the 750 mentioned above.

Turning next to the technical high school, the first point to note is that the school day here is much longer than that in academic, commercial and housecraft high schools. The minimum number of hours per week worked in the academic and commercial schools is twenty-five. In the senior sections of housecraft schools the school week is twenty-eight hours. In the technical high school it is thirty-two hours. This factor alone would make the combining of technical high schools with other schools into a comprehensive pattern, difficult, because of the administrative problem of time-table construction. But there is a further complication. About one third of the pupils in a technical high school are at any one time in workshops. This

would still further complicate the time-table if it were intended that ability groups in the various subjects be formed.

There is also a proposal to re-establish a trade school stream in technical schools. These pupils would spend about one half of their time in workshops and, of course, take less strenuous academic courses. This, too, would add further administrative problems.

It is to be remembered that the technical streams in comprehensive schools in, say, England take courses which are biased towards the engineering and building industries but do not offer pre-trade training as is done in South Africa. Hence to say that it is possible to combine a technical high school in South Africa with other types of schools to form a comprehensive school because it is done elsewhere in the world is no logical argument unless the type of training offered in these schools is radically changed. This is not envisaged at the present time. The conclusion to be reached is that technical high schools could not easily form part of a comprehensive school, though they might of a multi-lateral or bi-lateral school.

It is the general opinion of the Departmental psychologists that it would be undesirable to attempt to combine a special secondary school with any other form of school. At first sight it might be supposed that the boys' work in a special secondary school would fit easily into the pattern of a technical high school and the girls' work into a housecraft high school. This reasoning would be engendered because of the workshops, laundries and other specialist rooms which appear to be common to these schools. There are, however, sound reasons why such incorporation should not occur. The teachers in these schools have been specially trained for their difficult, though rewarding task. The principal, too, must have had a long experience of the administration of these schools. Yet again the pupils spend much more time in workshops and at practical work than the other schools mentioned and to provide for this would be a very difficult administrative manoeuvre. The mixing of this low intelligence group with the higher ability

groups might bring in some undesirable stigma. In the nature of the work these schools have to be reasonably small (the present proposal is not more than a 400 pupil enrolment) so that the arguments in favour of large schools to enable sufficient differentiation to be introduced have no validity in the case of the special secondary schools which have already introduced individual differentiation as the basic concept of their educational system. This implies smaller classes and larger staffs than found in other schools and this may contribute to administrative difficulties.

There are two other aspects of pupil enrolment which have to be considered in the determination of the sizes of schools. The first is whether the school is in a rural area. In section 10.2. of this chapter the number of pupils in rural high schools in 1968 was given as 23 553. This included all types of schools. Subtracting from this total 1 171 pupils in agricultural high schools, technical high schools and special secondary schools, the total becomes 22 382. Dividing this by 750 pupils, it would appear that not more than 30 high schools catering for academic, commercial and home economics courses are required. If the 1 853 secondary school pupils are included then the number of schools would have to be 32.

The second aspect is the urban area school. The table on page 450 shows that in only two urban areas were there (in 1968) schools of more than 700 pupils. The table shows that there are 12 schools with less than two hundred pupils, 16 schools with less than three hundred and 14 with less than four hundred pupils. These are not likely to grow into larger schools in most cases. There will be limitations imposed by sites, while in some cases where the districts are developing into business or flat areas there can be an actual serious decline in the number of pupils. There will be cases where schools can be combined by re-building on one or other site and making co-educational establishments. The solution in other cases will be, in places like Queenstown, Grahamstown, Worcester, Paarl and Upington, to bring into hostels pupils from surrounding small rural high schools. It is quite

NUMBER OF URBAN HIGH SCHOOLS WITH ENROLMENTS LESS THAN

URBAN AREA	100	200	300	400	500	600	700	800
CAPE TOWN	0	4	6	3	7	6	5	0
PORT ELIZABETH	0	1	1	2	3	3	1	2
EAST LONDON	0	1	2	0	1	3	1	0
KIMBERLEY	0	0	1	3	1	1	0	0
UITENHAGE	0	1	1	1	0	1	0	1
PAARL	0	1	1	0	2	2	1	0
QUEENSTOWN	0	0	0	1	1	1	0	0
GRAHAMSTOWN	0	0	2	1	0	0	0	0
WORCESTER	0	3	1	0	2	0	0	0
STELLENBOSCH	0	1	1	2	1	0	2	0
OUDTSHOORN	1	0	0	1	0	1	0	0
UPINGTON	0	0	0	0	0	1	0	0

apparent that some extremely careful planning will have to be done if the ideals behind the present re-organisation of secondary education are to be realised.

To quote again from the Biebuyck Report, "The basic structure of secondary schooling depends in many ways on the size of the school. This is largely governed by geographical and population conditions, though consolidated schools may become the trend in the Republic and elimination of small schools the official policy. ..... What is of concern is that the size of the school has no small bearing on the facilities that can be offered. This becomes important for the degree of differentiation that is possible and, from another point of view, for its effectiveness. Deployment of staff is, generally speaking, easier the bigger the school and, as a rule, the bigger the school the better the equipment. Whether the school is co-educational or confined to one sex is another factor. The comprehensive school in particular must be a large one to do justice to the degree of differentiation that vocationally oriented education dictates - especially when the number of technical subjects is increased and it becomes necessary to provide, with the minimum delay or friction, appropriate courses for the varied needs of pupils of all levels of ability. Differentiation in the multi-lateral or bi-lateral type of school is not a problem as this kind of organisation is born out of differentiation ..... ." [1]

This problem of creating large schools bristles with problems other than that of combining schools and finding adequate sites. There will be much opposition, for example, to turning the present secondary schools into purely primary schools even though that is what they are in reality. The standard V1, V11 and V111 pupils will have to be catered for, in very many cases, in hostels in the large high schools to be created. The same will have to happen to all pupils from the small high schools that will be closed down. The opposition will come from parents who do not wish their children to go to a boarding school and there will be much sympathy for those who genuinely prefer them

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1. Biebuyck Report. Op cit. pp. 14 and 15.

to be at home under parental care. As Bertrand Russell pointed out, "It seems to be the general opinion that there is something called the 'good home' which is better than any boarding school but that some undefined percentage of homes are not 'good' in the sense intended. ..... As children grow older the arguments in favour of boarding schools grow stronger. Much the weightiest of these arguments is that boarding schools can be in the country in the best surroundings, whereas day schools, for most children must be in the town. ..... home is apt to be a place where a child is subjected to nervous strain. It may be that the parents quarrel, that the mother is over-anxious, that the father is unkind ..... . In one way or another, home is too often emotional Children need a quiet life, containing enjoyments and activities, but few intense emotions. As against all this, it must, I think, be conceded that a due amount of wise parental affection is good for a child, giving him a sense of security and of his worth as a human being. Between these opposing considerations it is not easy to strike a balance. ..... The majority of parents feel affection for their children, and this sets limits to the harm they do them. But education authorities have no affection for the children concerned; at best they are actuated by public spirit, which is directed towards the community as a whole, and not merely towards the children ..... . Home gives the child experience of affection, and of a small community in which he is important; also of relations with people of both sexes and different ages, and of the multifarious business of adult life. In this way it is useful as a corrective of the artificial simplification of school. Another merit of home is that it preserves the diversity between individuals ..... ." [1] *It will, of course, be mostly the children in rural areas in the Cape Province who will have to attend boarding schools. 18 387 children in high schools, 1 603 in secondary schools, 3 196 in vocational schools of the technical, commercial and housecraft types, 769 in agricultural high schools and 441 in special secondary schools are already boarders.* [2] *The question which may then be asked is, if so*

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1. Bertrand Russell. "Education and the Social Order" London. George Allen & Unwin Ltd. Sixth Impression. 1961. pp.65-70.
2. 1968 Statistics. Cape Education Department.

many already are boarders, does it matter in which school they board? It is assumed, of course, that financial assistance will be afforded where necessary. It is conceivable that parents will listen to arguments advanced by education authorities that it is in their children's interest to attend larger schools. In any case it is obvious that many parents already send their children to a high school as boarders rather than to a secondary school. A perusal of the sources whence pupils come to high schools makes this abundantly clear. [1]

However, opposition is likely to come from other sources. Business people in the small towns which will lose their secondary and/or high schools will be much affected and are sure to make their voices heard through their members of Parliament and members of Provincial Councils. Such opposition will not be easy to overcome although it will have to be, if the proposed re-organisation of secondary education is to become a reality.

10.5. Types of Schools

Having seen the necessity for large schools in order to provide enough elective subjects to allow of sufficient differentiation, and realising,too,that in some cases, particularly in rural areas, combinations of schools will have to occur, the next question to be answered is, what type or types of schools are required?

This question has been suggested by a consideration of the implications of -

(a) the necessity for much more vocationally-directed education,

(b) the fact that insufficient attention has been given in the past to the number of pupils leaving school after completing standard VIII,

(c) the fact that not enough consideration has been given to the varied needs of the differing ability groups of pupils,

(d) the fact that new junior secondary courses are to be introduced,

(e) the introduction of new, differentiated senior secondary courses.

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1. The author of this thesis is an educational planner.

There is the fact that the Act 41 of 1967 lays down that vocational education shall not be provided elsewhere than at a vocational school and it has been explained that the schools defined as vocational schools are the technical high schools and the commercial high schools. Although most of these schools are already large and will grow further when the necessary accommodation is provided, it is nevertheless true that the rural areas in particular are poorly served in the provision of these types of education and the type of school to be established in the future will have to depend largely on the requirements of the area to be served. "Further developments should be by a process of evolution in the light of changing demands and needs" as the Biebuyck Report states. [1]

The general principles of the comprehensive school have been discussed in Chapter IX because this is a type of school finding favour in the United States of America, in England and Wales and in Sweden. Other countries, too, are experimenting in this field but the three countries mentioned have done much work in this connection and their experiences should be of help in determining our needs in the Republic of South Africa.

It is possible that "the comprehensive school offers the readiest solution to problems of guidance, allocation to courses, streaming or setting and change of course of subjects, and gives the best assurance that academic and vocational education are held in equal esteem. It is eminently suited to the aim of revealing to all its pupils the nature of the world of work, the variety of its opportunities and their own interests, aptitudes and capacities. On the other hand it presents problems of size, and of effective control by a headmaster who may be more interested in one type of education than in another." [2]

To some extent it has been shown that the statements of the last sentence of this quotation have not been proved in practice. That it would be necessary to train headmasters to take control of these schools is beyond doubt, but it would not pose a very serious problem.

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1. *Biebuyck Report. Op cit. p.21.*
2. *Ibid. p.20.*

However, there are other arguments against the introduction of this type of school. In South Africa any child who passes a normal standard V examination is likely to find a place in a high school. It may not be the high school of his first choice because some high schools are more popular than others and selection procedures are employed. The necessity, therefore, to compel a school to take children is not generally required in the Cape Province.

With the growing industrialisation of South Africa there is a growing number of artisans and technicians and the reluctance to send children to vocational schools is disappearing very quickly indeed. In fact the vocational schools find it difficult to meet the demand for places. (The housecraft high school is not included in this statement for reasons given in Chapter III.) The problem of stigma, then, can, to a large extent be disregarded especially now that divided control of secondary, full-time education has ended.

It has already been shown that it would be difficult, without altering the nature of technical high school courses, to integrate these into a comprehensive high school, and without the technical bias provided, a school cannot be truly comprehensive.

Experience has shown that most dissatisfaction comes not from the inability to obtain technical education but commercial education.

These arguments lead to the conclusion that the possible solution to the problem lies in the establishment of bi-lateral or multi-lateral schools. Possibly the terms need explanation in the manner in which they are intended to be used.

A bi-lateral school is a high school with two sides - an academic side and a commercial side. There would be one principal and a deputy principal who would have general supervisory and administrative duties in addition to some teaching. Then there would have to be a vice-principal for each of the sides to give guidance in specialist subjects. Such a school would have a number of advantages over two separate schools. There would be an economic use of staff, buildings, equipment and sports facilities. All of these are becoming increasingly

important. There is a shortage of highly trained staff, building costs are rising phenomenally, more and more audio-visual and teaching aids are being provided as free issues to schools and in towns particularly, sites for schools with adequate sports facilities are becoming increasingly difficult to acquire.

From the pupils' point of view, after the initial exploratory two years in the school, changes of course or subjects would be much facilitated by being members of one school. It would, of course, be necessary for the provisions of Act 41 of 1967 to be amended to allow of this type of school. It was mentioned in Chapter IV that the Minister has allowed certain rural academic schools to offer three full commercial subjects. In view of the fact that the commercial high schools in urban areas are full to their present capacities and in view of the increasing demand for vocationally-directed education, it would appear wise to allow, even in urban areas, for the introducation of the bi-lateral school.

A multi-lateral school is a high school with three or more sides - an academic, commercial, technical and home economics side. This type of school is envisaged more for the rural areas although a three sided school - academic, commercial and home economics - might be worth experimenting with in some urban areas. It has already been pointed out in Chapter III that one possible reason for the unpopularity of housecraft high schools is the fact that they are situated in rural areas. The difficulties of running a technical school in conjunction with other types of schools have already been mentioned. They stem from the longer school day that is necessary in a technical high school because of the time demanded for workshop practice. The problem is not insuperable and for the rural areas, where the provision of technical education is quite inadequate, it would seem wise to experiment with the multi-lateral school.

There would be, of course, the same economies of staff, buildings, equipment and sports facilities. In fact there could be bigger economies in buildings because the workshops of the technical section could be

used for metalwork and woodwork by the boys in the academic stream who could also use the drawing offices of the technical section for the drawing section of their syllabus in these subjects.

It would be essential in both bi-lateral and multi-lateral schools to foster a feeling of unity amongst the pupils despite the various divisions of the school.

Time table problems would almost certainly prevent the introduction of streaming in common subjects like Afrikaans, English, physical science and mathematics. There seems no reason, though, why a house system and a tutorial system as used in comprehensive schools should not be used, the house system particularly for extra-mural activities and the tutorial system for the personal interest of at least one member of the staff in a certain number of children. It is undoubtedly of great value to a pupil to have someone on the staff to whom he can turn with problems of any sort, personal, spiritual, academic or whatever they may be. However, organisational matters like this are best handled after experiencing them, and as long as the broad principle of one school for all the pupils, irrespective of the course taken, is established experiments with various methods for meeting the situation could be tried in different schools.

CHAPTER XI

Summary and Conclusion

11.1. Introduction

"A national system of education is a living thing, the outcome of forgotten struggles and difficulties and 'of battles long ago' " said M.E. Sadler in a lecture he delivered in 1910 entitled 'How far can we learn anything of practical value from the study of foreign systems of education?' He went on to add, "It has in it some of the secret workings of national life. It reflects, while seeking to remedy, the failings of national character. By instinct it often lays special emphasis on those parts of training which the national character particularly needs. Not less by instinct, it often shrinks from laying stress on points concerning which bitter dissensions have arisen in former periods of national history." [1]

In this thesis an attempt has been made to recall some of the struggles and difficulties that are in the process of being forgotten.

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1. Quoted by I.L. Kandel in 'The New Era in Education' London. George G. Harrap & Co. Ltd. 1966. p.9.

Reflected, inevitably, have been failings and dissensions but to have hidden them or minimised them would not have been honest and would have lessened any worth that the work might have.

Possibly the portion of the work that was in most danger of being forgotten was the history of the individual vocational schools. Of themselves, perhaps, they are not important, but because the schools came into being the problems that have been confronted and solved and the many problems which still exist, evolved. As Dr. Potgieter wrote, "Presumably, people are chiefly interested in the history of education as well as history in general because it gives them an account of how the present came to be what it is. Of course there will be some who have an antiquarian interest in the past as the past, but they are not likely to be many among professional students of education. Such students will have an interest in the history of their profession, if at all, because it illuminates the contemporary problems with which they have to deal." [1] *It would appear that both aspects are here - the antiquarian interest in simply recording what may easily be forgotten of the evolution of the vocational schools, and the illumination which may be thrown on the current problems.*

No attempt will be made to recapitulate any of the details from the briefly sketched histories of the individual schools but rather to look again at the events which have led to the present state of vocational education and try to catch some glimpse of the future.

11.2. The People of South Africa

The original settlers in the Cape were Dutch and Protestant West Germans and brought with them a tradition of religious education. Until well into the second half of the nineteenth century what little formal education there was, was mainly religiously orientated and under strong influence from the Dutch Reformed Church.

The French Huguenot settlers and, much later, in the nineteenth century the English and German immigrants were mostly folk of strong

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1. Dr. E.J. Potgieter. "A Modern Approach to Historical Pedagogy" South African Journal of Pedagogy. Vol. No.2. December 1967. University of Pretoria. p.96.

religious convictions, ambitious for their children and, for both these reasons, believing profoundly in education. This, combined with a freedom-loving and independent spirit has greatly affected their social and political outlook and therefore, ultimately, the nature of their educational systems.

At the beginning of the nineteenth century opinions were being voiced at the Cape that education should be secular, under government control, available to all, free from Church influence and that local taxation for educational purposes was essential. The population, in general, was not ready for these advanced ideas but two guiding principles had begun to emerge - state responsibility for education and parental participation. A pattern of state-controlled education began to evolve and in 1839 the first Superintendent-General of Education for the Cape Colony was appointed. The practice of giving state aid from central funds was established based on the £ for £ principle and so local authorities who had to raise their share of the finances by local taxation gained the voice in affairs which they sought. [1]

As far as industrial education was concerned Dr. Langham Dale, the Superintendent-General of Education, introduced a measure of industrial training for European youths beginning in 1873 but he was forced to report to the 1879 Education Commission that the farmers resisted such education. "They did not see why their boys should go into a carpenter's shop or blacksmith's shop every afternoon and I have to live that down." [2] *The opposition to doing manual work persisted for many years, and was undoubtedly the product of slavery at the Cape and of the existence of a multi-racial society with the white man socially and educationally superior. Professor Botha commented on it in his report for 1933 and 1934. " ..... to make speeches and solve the political problems of the country appear to have the strongest attractions for the Afrikander - and that they are too little inclined to take off their coats and perform productive labour."* [3]

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1. Behr and MacMillan. "Education in South Africa" Pretoria. J.L. van Schaik Ltd. 1966. p.7.
2. Education Commission. 1879. (President:Sir John Henry de Villiers, Chief Justice.) Evidence by S.G.E.
3. Report of Union Education Department for 1933 and 1934. p.8.

How long this attitude would have prevented or delayed the introduction of vocational education is difficult to say but a poor White problem developed in South Africa for reasons explained earlier and it became necessary to deal with the problems of indigency and unemployment.

11.3. The Industrial Schools (Trade and Housecraft)

These schools had their beginnings because of the acute economic distress which caused such grave concern to public spirited people many of whom were members of the Dutch Reformed Church. Through the good offices of these people and agencies like the Armesorgkommissie and the Afrikaanse Christelike Vrouevereeniging children of indigent parents were given some general elementary education and practical training in cabinet-making, blacksmithing, carpentry and wagon-building, tailoring, dressmaking, laundrywork and such subjects. This, of course, served the good purpose of combating the bad habits of indolence that were being formed and turned the youths into handymen.

No educational requirements were, at first, laid down for admission to these schools but by 1922 standard VI was specified and the course had become of three-years' duration.[1] Gradually the number of schools increased but, although run somewhat on factory lines, the cost of this type of education was expensive and this was to have an important bearing on the future of these schools.

11.4. Technical and Commercial High Schools

Industrial education grew out of poverty amongst the European population of South Africa in the late nineteenth and early twentieth centuries but technical education grew out of the steadily increasing need for trained personnel in industry and commerce, in the mines and on the railways. Part-time classes were started to train apprentices and commercial employees. The Railways Administration, for example, started classes at Salt River, Cape Town, in 1890 and later at Uitenhage, East London and Kimberley. The Cape Town Chamber of Commerce organised

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1. "Education in South Africa" Op cit. p.183.

evening classes for its young employees. Evening classes were started by the South African College and these, like the Salt River classes, grew quickly and together with them were taken over by the Cape Town School Board and eventually became the Cape Technical College. Evening classes in the other centres and in Port Elizabeth also developed eventually into technical colleges and in these technical colleges were started technical and commercial high schools. Doubtless because they were a later development than the industrial schools, but also because no stigma of indigency attached to them, the standards set and maintained in these schools were always higher, in the early years, than those expected from the industrial schools.

11.5. Agricultural High Schools

Despite the fact that the need for agricultural training for farmers has always been recognised in South Africa very little was actually done to provide training facilities up to 1925 when the Union Department took over all vocational training. In the Cape, at that time, were the schools at Stellenbosch and Grootfontein (which became colleges later) and there was a little agricultural training done at some industrial schools.

By the Act No.30 of 1937 the Provinces re-assumed control of full-time secondary agricultural education. During the period 1925-1937 the Union Department of Education had established schools at Clanwilliam, Riversdale and Cradock. Since 1937 two other schools have been established, one in the Northern Cape at Vaalharts and the other in the Boland in the Agter Paarl area. Yet another is in course of being built at Fort Beaufort.

11.6. Special Secondary Schools

These schools were established to provide a vocational training for mentally-retarded children able to benefit from training in one or other of the simpler trades. They serve a most useful purpose in making self-respecting tradesmen and tradeswomen out of pupils who otherwise would have drifted into some kind of unskilled occupation and eked out a precarious livelihood without confidence in themselves.

There are seven such schools at the present time, at East London, Port Elizabeth, Uitenhage, George, Kimberley and two in the Cape Town area. A further one for Saldanha is being planned by the architects now and schemes for at least two more - one at Port Elizabeth and one at Milnerton - are being considered.

These schools have never been under the control of the Central Government, and have always been used by the Province in its endeavour to provide a suitable secondary education for all pupils. This has not always been so with the other vocational schools. The reasons will be briefly reviewed.

11.7. The South Africa Act, 1909

Clause 85 (iii) of this Act gave to provincial councils the right to provide "Education, other than higher education, for a period of five years and thereafter until Parliament otherwise provides." The right to take over education is retained in the Republic of South Africa Constitution Act, Clause 84 (i)(c) which reads, "Education, other than higher education and Bantu education, until Parliament otherwise provides." It seems as though it was the intention to bring all education under Central Government control. "In 1909, at the National Convention, the majority of delegates favoured the taking over of education by the central government. Natal, however, pressed strongly for a federation. The final compromise resulted in the provinces being given control of education." [1]

All would have been well if the horizontal division which occurred had been at standard X level. This did not prove possible, and the problems which arose and prevented the compromise working smoothly had to do with the training of teachers and with vocational education.

As far as teacher training is concerned there are still two schools of thought just as there were in 1910. The one holds that teacher training is a national function and should be in the hands of the Central Government through the agency of the universities. The

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1. Ibid. p.7.

other school is of the opinion that because primary and secondary education is a provincial function, the Provinces should train and control the certification of teachers.

With regard to vocational education, as early as 1912 when a conference was called and resulted in the appointment of a national board and a technical adviser, it was becoming obvious that this type of education was being regarded in some quarters as a national and not a provincial matter. The justification for this attitude was that industry and commerce are pre-eminently of national concern. But probably the factor that proved decisive in the taking over of vocational education by the Central Government in 1925, was that of finance. The provision of proper vocational education is, in its nature, a very expensive procedure. The Provinces found it very difficult, because of the modest subsidies received from the Central Government, to provide adequately for this type of education. A number of commissions starting with the Murray Commission in 1911, then the Jagger Commission of 1915, then the Baxter Commission of 1922 went into this question of subsidies but eventually at a conference in Durban in 1924 between the Minister of Finance and the Minister of the Interior, Public Health and Education and representatives of the Provincial Administrations it was decided "to meet the undoubted demand for unity of control and co-ordination in that part of the field where it is most required." [1] A press report at the time read, " ..... it being realised that technical industrial and vocational training is vitally connected with, and is an integral part of the general industrial policy of the country which is in the hands of the Union Government; that co-ordination and a unified system of administration, inspection and examination will make for economy and efficiency." [2] So it was that from 1st. April, 1925, vocational education began to pass to the control of the Union Education Department where, with the exception of the agricultural schools, it remained until 1st. April, 1968.

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1. Ibid. p.10.
2. Ibid. p.186.

11.8. Divided Control of Full-time Secondary Education

From some points of view it was unfortunate that the Provinces yielded their responsibilities for full-time, secondary vocational education to the central government. What had started as a horizontal division of education at standard X level became a vertical division because the Union Education Department accepted responsibility for the education of children of all ages in many types of school. This had unpleasant repercussions in unhealthy rivalry between provincial and government schools where no rivalry should have existed. The implication was that far too often pupils attended the wrong type of school for the development of their particular aptitudes and abilities and the stigma of indigency (to which was added that of delinquency because of the Childrens' Act Schools being controlled by the same department which controlled the vocational schools) persisted far too long for the sound development of technical, commercial and housecraft education. Thus the idea of adequate differentiation in secondary education must have been delayed longer than necessary and there was an absence of any form of national policy in education. Implicit, too, in this divided control was waste - waste of time, money and human energy.

The question of demarcation of functions between provincial and central government education departments kept arising and were dealt with, unsatisfactorily in most cases, by a number of commissions. Prominent amongst these were the Provincial Administration (Jagger) Commission of 1916 which proposed the abolition of provincial councils and the setting up of district councils. These councils were to be entrusted with all aspects of education under a chief inspector responsible to the central government. Another commission which was of significance was the Education Administration (Hofmeyr) Commission of 1924, which found that the educational work being done was chaotic because of the lack of co-ordination and well-defined policy. Even the provincial education departments appeared to work in isolation. The Commission proposed that a statutory Union Board of Education be set up, not to supersede the Provinces, but with full power to

co-ordinate the work. It was partly due to the recommendations of this commission that the 1924 Durban Conference was held.

The Provincial Finances Commission (Roos Commission), 1934, because of its recommendation that Parliament should, if necessary, enforce co-ordination of the educational work, was responsible for the creation of the Inter-Provincial Consultative Committee. In point of fact most of the work done by this committee between its setting-up in 1935 and its demise in 1956, was of an administrative nature and no problems of paramount educational importance were tackled. This committee would not agree to the creation of an advisory, co-ordinating national education board and this, in the light of the subsequent creation of a National Advisory Education Council in 1962, can only be regarded as a regrettable decision because of the unnecessary delay.

The other commission which did outstanding work was the Commission on Technical and Vocational Education (de Villiers Commission), 1948. This Commission, too, recommended the formation of a National Council for Education representative of educational systems and teacher organisations, industry and agriculture. The powers and functions of this Council were to be defined by Act of Parliament and the secretariat was to be the Union Education Department.

The Commission's opinion was that this Council should determine the broad, general educational principles of the Union, co-ordinate the educational services, be responsible for the training, certification and registration of teachers and for their conditions of service, initiate and promote educational research, control subsidization and prepare or scrutinise legislation on educational matters for Parliament.

It thought that education should be centrally controlled and the country divided into educational units.

Despite all these reports divided control of education at full-time secondary level continued and another of the unfortunate consequences which resulted from it was, that in the endeavour to prevent overlapping of functions of provincial and central government schools, regulations

were laid down as to what subjects of a vocational nature might be taught in various types of schools. Now that divided educational control has ended, these regulations are proving a stumbling block to future development, particularly where differentiation is concerned, and it appears that the Minister may find it necessary to alter some of these regulations to prevent further inhibition of progress.

It is not to be supposed, however, that no good came of divided control This would be far from the truth. When the Union Education Department took over vocational schools in 1925 they were, for the most part, in a poor condition both as regards accommodation and equipment. Very little provision had been made for the training of teachers of practical subjects. It required the financial resources of the Central Government to rectify these matters and, even with this backing, progress was slow. Nevertheless in the forty-three years of control exercised by the Union Education Department (later re-named the Department of Education, Arts and Science, still later the Department of Higher Education and now the Department of National Education) derelict buildings were replaced, obsolete equipment scrapped and modern equipment supplied, syllabuses were co-ordinated and revised and teacher training facilities introduced. The schools built, particularly in recent years, have been of a very high standard and the standards attained in them are now good. A very good system of subject inspection was introduced which, over the years, helped considerably in raising teaching standards.

11.9. The Resumption of Provincial Control of Full-time Secondary Education.

The Educational Services Act, No. 41 of 1967 transferred full-time vocational education back to the Provinces. As implied above, a certain amount of protection is afforded to technical high schools and commercial high schools by regulating the amount of vocational subject teaching which may be done in other schools. Housecraft high schools are no longer protected.

It is probably fair to assume that it is intended to prescribe a

National Education Policy which, whilst not yet fully defined, stresses the need for guidance to pupils and the provision of a differentiated system of secondary education. There were two ways in which this could have been tackled. The Government could have utilised its right to take over the control of all education or it could (and did) delegate its powers in regard to full-time secondary education to the Provinces.

Since today there is very close inter-provincial co-operation in the field of education, it does not seem to matter that the Government chose the latter method. There is, too, an inter-departmental committee which is responsible for the syllabuses in technical high schools and commercial high schools. The examinations for standards VIII, IX and X are still controlled by the Department of National Education but this may have to cease: it is causing problems for the provincial departments because the inspectors have to be au fait with two set of syllabuses and, therefore, with two possible sets of interpretations of what are intended to be basic syllabuses. Apart from this aspect, the dual system is wasteful of time and money because each Province has an efficient examinations section and many subjects are common to all types of high schools.

There may be some danger that the implications of the importance of vocational education are not yet fully appreciated by the provincial authorities. As Hugh Warren wrote, "The material environment we now live in, the instruments of our daily work, the processed foods we eat, sometimes the very air we breathe, have come about as the result of technological development. Likewise a nation's economic well-being, its standard of living, its potential growth and security, all depend very greatly on the efficiency of its system of technical education and training and on the amount of effort and finance the nation is willing to devote to it. Technical education is far from being the only factor in a nation's economic growth, but it is certainly an essential component. Yet this very system - its structure, methods and techniques - has risen above the sub-conscious level of thought and planning only in recent years. Even now, for many administrators and even educators,

vocational and technical training is an unknown territory." [1]

This country dare not neglect the development of vocationally-directed education. There is a constantly growing demand for trained people at all levels - semi-skilled and skilled personnel, technician and engineer, and all the equivalent levels in the field of commerce.

Of course, this too, is true. " ..... except for short-run and precisely definable problems of demand, the only satisfactory definition of the task of the educational system in relation to the labour market is in general structural rather than quantitative terms. It is not possible, generally speaking, to equate through education the abilities of individuals with the intellectual requirements of occupations; and no economic system can be so organised as to allow everyone to use his full talents in his employment. The best that can be done is to eliminate rigidities in supply and leave talent to find its own level." [2] *The same report goes on to point out that the aptitudes and abilities of individuals are rarely specific. So long as there is equality of educational opportunity and freedom of vocational choice and of movement between occupations, individuals may be expected to find their way into positions which will stretch their capabilities and enable them to make their maximum contribution to the needs of society. The best contribution that the educational system can make is to send forward recruits to the labour force, potentially mobile and within the widest possible range of occupations.* [3]

It is obvious then that educationists have an important role to play in preparing pupils for a world of change, in furnishing adequate guidance and providing equality of educational opportunity.

11.10. Equality of Educational Opportunity

"Outstanding everywhere today are two issues ..... the prolongation of school attendance and the provision of equal educational opportunities for all. Neither of these issues is simple and both are dependent upon

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1. *Hugh Warren. "Vocational and Technical Education" Monographs on Education - V1. Paris. Unesco. 1967. p.13.*
2. *A.H. Halsey (Editor) "Ability and Educational Opportunity" Report on Conference organised by the Office for Scientific and Technical Personnel, Sweden. 11th-16th June, 1961. O.E.C.D. p.92.*
3. *Ibid. p.93.*

social readiness and parental co-operation. Both issues involve serious educational implications that involve the organisation of various types of school or one school with different courses, reconsideration of curricula, guidance and the distribution of pupils in accordance with their abilities and aptitudes. And underlying all these aspects of the outstanding issues are, first, the financial ability of a people to support an extended and differentiated system of schools, and, secondly, the more immediately pressing demands of a rapidly increasing school population ..... . Of these aspects the second involves the provision of more school buildings at a time when materials are not yet in full supply and the costs are high, and when the prospects of securing an adequate number of teachers to maintain the present ratio to the number of pupils are not good. They are still less promising if one looks for the provision within a reasonable time of such a supply of teachers as would make possible the reduction of class size to that implicit in contemporary educational theory." [1]

So wrote I.L. Kandel in 1966 and he could have been writing about just the position which confronts us in South Africa now.

With the provision of free secondary education it is possible, so far as education authorities are concerned, for every normal child and for more below-normal children to receive secondary education. It is accepted that it is in the best interests of the nation that every individual should be given the facilities to develop his or her capabilities to the greatest possible extent. Primary and secondary education should prepare children to lead useful lives in the service of society, carrying out the tasks for which their talents best fit them; but at the same time it is generally believed that this education should develop in them an appreciation of cultural values so that the increased leisure, which modern times have given them, may be sensibly used and enjoyed.

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1. "*The New Era in Education*" *Op cit. pp.15 and 16.*

It has already been said, but will be repeated for the sake of emphasis, that it is vital both for the country and for the individual, that the educational system find ways of discovering the talents of every educable child and developing them. Otherwise the community suffers an insupportable loss of man-power and individual lives are impoverished and frustrated.

This sounds idealistic and is, and the problems involved in discovering the differences in abilities are far from simple. This is why it will be necessary to provide large schools. Errors will assuredly be made in allocating pupils to courses and such errors will most easily be corrected inside a school rather than by a change of schools. If equality of educational opportunity means the provision of the right education for the right pupil under the right teachers, then, somehow, without permitting pupils to discover through failure that they have selected the wrong course, they have to be helped to discover the right course with the minimum of delay.

This, one supposes, is at the heart of the proposed junior secondary course. Through the primary school and during this middle school course pupils can be watched and receive guidance - for at the heart of the system will be the development of an adequate guidance service. The techniques of this system will have to include a consideration of the absorptive capacity of our economy. "Overproduction for professions and occupations can become as serious a menance to national stability as overproduction in industry and agriculture." [1]

A large school has been mentioned because of the choice of subjects that may be offered. In rural areas such schools will have to provide all forms of education with the possible exception of special secondary vocational courses and certainly of agricultural high school courses which, by their nature, must be provided in separate institutions. Certainly the ordinary academic, commercial, housecraft and technical courses should be combined at strategic centres.

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1. Ibid. p.106.

In urban areas this may present difficulties if technical courses as at present prescribed are included. This type of education is very expensive and therefore equipment is to be used as economically as possible. Ipso facto this implies a large school. But the technical courses themselves will have to become more differentiated than they are at present by the addition of one more course for those of poor mental endowment who will proceed only to apprenticeship.

What is quite certain is that the "provision of secondary education for all will require much further research to discover techniques for the discovery of the abilities and aptitudes of the pupils at the point of transfer from primary to secondary schools. The purpose of such techniques is not to select pupils but to distribute them to the type of education best suited to their abilities." [1]

11.11. Curricula

There was a time when the curricula in vocational schools paid far too little attention to general education - but this was in the very early days of the industrial schools and trade schools. As was mentioned earlier, one of the results of the 1925 take-over by the Central Government was the gradual introduction of more liberal studies into the curricula of vocational schools. This is not to say that liberal education should be contrasted with vocational education if by liberal education is meant a knowledge of certain subjects. Liberal education surely means certain habits of mind, attitudes, breadth of interest and a sense of responsibility. Vocational education which does not produce these same traits, habits and interests is not education but training in developing mechanical skills. The position has been put succinctly thus, "Technical and vocational education should be an integral part of an over-all system of education and, as such, due consideration should be given to its cultural content. It should do more than train an individual for a given occupation by providing the persons concerned with the necessary skills and theoretical

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1. Ibid. p.113.

knowledge; it should also, in conjunction with general education, provide for the development of personality and character and foster the capacity for understanding, judgement, self-expression and adaptation to varying environments. To this end, the cultural content of technical and vocational education should be set at such a level that the inevitable specialisation in technical and vocational education does not stifle broader interests." [1]

In South Africa there is much in common between vocational and general education and this is apparently so in many other parts of the world. All pupils are expected to acquire some mastery of their own language and some knowledge of the other official language. The primary purpose is that they be able to express themselves clearly, read with understanding and have some ability to understand their own literature. So, too, they should become numerate at least to the degree that everyday life demands. A knowledge of the world in which they live - its history, geography and some of the social issues is regarded as essential. It is becoming obvious, too, that some knowledge of their physical environment and of the influences of science and technology on daily living is necessary. It is recognised that there is an educative and social value in music, arts and crafts. The place of physical education is not now disputed, These are components of all education. Hence there is a need to prevent too early specialisation so that these aspects of general education be not neglected. Hence, again, the justification for a junior high school course, because the concepts mentioned above are the very foundation of secondary education for all.

There will have to be differentiations in content and methods of instruction to suit the abilities of the pupils, but this is inevitable if all pupils are to receive equal educational opportunity.

11.12. Conclusion

This thesis really began with a study of the schools that were established to rescue from destitution and degradation the children of

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1. *"Technical and Vocational Education" Recommendations by Unesco and the International Labour Organisation. Paris (Unesco) and Geneva (I.L.O.) 1964. p.36. paragraph 7.*

indigent parents. From these small and charitable beginnings has evolved a system of vocational education by no means to be despised. It caters for a steadily increasing number of pupils and will have to deal with many more if the economic future of South Africa is to be safeguarded. It may well be that there will be more vocationally-directed education than direct vocational education because the demand of the future will be for many people easily able to adapt themselves to change.

However, it has been shown, perhaps more by implication than by direct statement, that the system still caters more for the highly intelligent pupil than for those below average. It is, of course, right to make adequate provision for these gifted children but one is concerned about what is being done for the remainder. The work of the special secondary school taking pupils with intelligence quotients of 75-84 has been discussed. The technical high schools take pupils with intelligence quotients of 90 or more. The commercial high schools take only those pupils who have passed standard VII. There are groups of pupils who lie in between, and there is a certain tendency even amongst the best-intentioned educationists to shrug them off until the rest of the system has been worked out. One recalls Professor Whitehead's words of warning and applies them to these groups: "When one considers in its length and in its breadth the importance of this question of the education of a nation's young, the broken lives, the defeated hopes, the national failures, which result from the frivolous inertia with which it is treated, it is difficult to restrain within oneself a savage rage. In the conditions of modern life the rule is absolute, the race which does not value trained intelligence is doomed. Not all your heroism, not all your social charm, not all your wit, not all your victories on land or at sea, can move back the finger of fate. Today we maintain ourselves. Tomorrow science will have moved forward yet one more step, and there will be no appeal from the judgement which will then be pronounced on the uneducated." [1]

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1. A.N. Whitehead. Op cit. p.22.

APPENDIX 1.

Household Science in South Africa.

To my mind no greater or more urgent need exists in this country than the training of women and girls in household science. It is a matter of the greatest importance, not only to individuals, but also to the whole nation, for it will mean raising the standard not alone of the homes, but of the whole race; while many more happy homes will be the result, as well as a healthier and more prosperous nation.

In my travels through the country the last 18 months, I have had the opportunity of making a close study of conditions in the homes, particularly in the rural districts, and they are, on the whole, very bad. Not the first rudiments of cookery are understood, and instead of the food being prepared in a wholesome manner, it is rendered unpalatable and indigestible through improper cooking. There is a great lack of industry, simply through the want of knowledge of how to do things. A fact which has impressed me very forcibly is the enormous amount of fruit, vegetables and meat that is being wasted owing to the principles of canning and preserving not being known. In a country like this, with a plentiful supply of fruit and vegetables, there should be no need for importation, and in this branch alone there is tremendous scope for women to direct their energies greatly to the country's benefit. It would also mean that more vegetables would be grown - every woman would endeavour to have a vegetable garden of her own in order to have her pantry well supplied for winter use, and so, instead of having the inevitable "zout ribbetje" which is not to be despised, and pumpkin, day after day, she would have a greater choice of meat, and especially wholesome green vegetables. It is a lamentable fact that we in South Africa do not sufficiently realise the importance of vegetables in our diet, and there is no doubt that many of our ailments can be ascribed to their absence, and therefore to a lack of sufficient mineral, which is so essential to the health and well-being of the body.

I cannot sufficiently emphasise the necessity of every woman studying food values, which alone can teach her to practise economy, and how best to provide the body with all its requirements. Not until women become intelligent cooks and learn to feed children in the right

way, can we ever hope to build up a strong and healthy nation. Numbers of children are sacrificed annually through the ignorance of mothers, and this fact alone should impress upon us the urgent need of such training.

When conducting practical demonstrations at the various agriculture shows and at different centres in the country districts, my personal experience has been that the women are only too keen to take advantage of every opportunity of acquiring knowledge and information pertaining to household matters, and of learning the best and most approved method of doing things.

I feel that there is a great field for itinerant lecturers in South Africa, and I trust that the day is not far distant when a staff of lecturers will be employed to travel through the country districts and so enable women to benefit by the useful, practical knowledge from which they would otherwise be debarred through being unable to attend schools of household science.

Young, untrained housekeepers are constantly complaining of the numerous difficulties which confront them, and with which they are incompetent to deal; while untold misery prevails in many homes through mismanagement of household affairs. Women are becoming more and more impressed with the fact that our present system of education is inadequate in that it does not equip them to fight the battle of life. numbers of young women have expressed their regrets to me that so much of their time has been wasted in what they consider useless subjects such as Greek, Latin, geometry, maths, etc., which they maintain could have been employed to far greater advantage in fitting them for that sphere of life for which most women are destined, namely that of home-making.

Further, such a training would open up many new fields for women, such as bee-keeping, poultry-keeping, dairying, floriculture, gardening, horticulture, etc., which are bound to have great influence in the producing powers of the country, and instead of being, as it were, so much waste material, every woman would then become a real national asset. Already I know of several successful women-farmers in this

country. During my recent Natal trip I had the pleasure of becoming acquainted with a lady who is turning over handsome profits from a small plot of ground which she has put under fruit, converting the products into preserves, jams, jellies and canned fruits, for which there is always a ready market.

We receive letters of enquiry almost daily with regard to training facilities for women in the above branches and it does seem a matter of great regret that at present there is not a single institution in South Africa, so far as I am aware, where such training is offered. It is true that a beginning has been made in some of the Provinces, but as yet the instruction is more or less of an elementary nature, while teachers in household science cannot as yet be trained here. It is hoped, therefore, that ere long something definite will be done in this respect, and I would strongly urge that scholarships be established for girls to study household science oversea on the same principle as the agriculture scholarships have for some time been granted. In this manner we shall secure a number of South African girls who will be competent to fill these posts when a school of household science is established, and will be better able to apply their oversea training to the requirements of this country. As it is, I have heard many criticisms where attempts have been made to introduce certain methods, which, while practical in other countries cannot be applied here.

It is most likely that objections will be raised with regard to scholarships for girls on the grounds that the Government may lose their services through marriage, but, I do not believe that there is much danger in this respect, for I feel sure that women have as great a sense of loyality to their country as men, and I have no doubt that, given the opportunity of studying overseas, they will only be too anxious and willing to faithfully discharge their duties to their country's welfare. Besides, provision can be made in the contract covering this difficulty with regard to the length of time the student should be expected to serve. I consider that for a two-years' training she ought willingly to bind herself for three or four years' service.

Briefly, the following, I consider, are the requirements for this country concerning the development of household science:-

(1) A school of household science should be established at the earliest opportunity for the training of teachers; while courses should also be offered for professional housekeepers, hospital dietitians, home-makers, practical short courses for farmers' wives, etc.

(2) Elementary courses in household science, such as cookery, laundry, millinery, sewing and hygiene, to be introduced into curriculum of all schools.

(3) A staff of itinerant lecturers to travel through the country.

(4) Women's institutes to be formed on similiar lines as those in Canada.

(5) Bursaries for girls to study household science oversea.

J.C. van Duijn.

Pretoria.

APPENDIX 2

12/10/57

Die Sekretaris,

Staatsdienskommissie.

Opleiding Van Vak-en Tegniese Onderwysers Vir Diens by Tegniese Kolleges en Beroepskole.

1. Weens die toenemende aanvraag vir opgeleide ambagsmanne en die snelle ontwikkelinge op nywerheidsgebied, is dit dringend noodsaaklik dat die beskikbare fasiliteite vir die opleiding van vakmanne uitgebrei word, nie alleen om meer vakmanne op te lei nie, maar ook om opleiding te verbeter.

2. Die tyd het aangebreek waar iets daadwerkliks in die rigting gedoen moet word, maar met die beskikbare personeel is dit 'n onbegonne taak. Dit is van selfsprekend dat die opleiding by tegniese kolleges en beroepskole alleen doeltreffend kan wees indien die tegniese onderwyspersoneel self opgeleide en ervare ambagsmanne is wat geskoold is in die onderwystegniek. Hierin ondervind die Departement moeilikheid om behoorlik gekwalifiseerde personeel te werf om bestaande vakatures te vul en met die uitbreiding op nywerheidsgebied gaan die probleem steeds groter word. Persone wat aansoek doen om vakatures is meesal ambagslui wat geen opleiding in die onderwystegniek gehad het nie. In ander gevalle weer het die kandidate nie genoeg ervaring van die praktiese kant nie of geen aanleg vir die onderwys nie. Die wat wel die vereiste kwalifikasies besit vind die beginsalarisse nie aanlokkend nie omdat dit minder is as wat hulle in die nywerhede verdien.

3. Die gevolg is dat die Departement nie die beste persone kry om ander op te lei nie.

4. Benewens bogenoemde is daar ook 'n nypende tekort aan tegniese onderwysers dit wil sê onderwysers wat in staat is om

die aanvullende teoretiese vakke soos tekene, meganika, sterkte van materiaal en toegepaste wiskunde te doseer. Selfs persone wat 'n gewone graadkursus aan 'n universiteit gevolg het is nie in staat om hierdie vakke sondermeer doeltreffend te doseer nie.

5. Om hierdie moelikhede te oorbrug beoog die Departement om fasiliteite daar te stel vir die opleiding van onderwysers by wyse van voltydse en deeltydse kursusse wat ingestel moet word aan die Pretoriase Tegniese Kollege. Voltydse en deeltydse kursusse sal onderskeidelik een en twee jaar duur en die Departement is voornemens om wat eersgenoemde kursusse betref, 'n aanvang te maak deur jaarliks 40 voltydse studente te werf wat;

(a) in die geval van assistentvakonderwysers die N.T.S. III - sertifikaat besit en 'n vakleerlingskap plus 'n minimum van twee jaar ervaring in hulle ambag voltooi het. Aangesien die Departement geen ander keuse het nie word bogenoemde as die minimum vereistes op hierdie tydstip gestel. 'n Verhoging daarvan kan later oorweeg word sodra omstandighede meer gunstig is;

(b) in die geval van tegniese onderwysers,

(i) die Nasionale Diploma in Ingenieurswese, of Boukunde of Tekene besit en 'n vakleerlingskap voltooi het, of

(ii) die B.Sc. (Ingenieurswese) besit of

(iii) 'n Universiteitsgraad met wiskunde en/of fisika as hoofvakke, besit.

6. Die toelatingsvoorwaardes sal verder soos volg wees:-

(a) in die eerste plek sal 'n student 'n aanstelling op twaalf maande proef as assistentvakonderwyser (of as tegniese onderwyser na gelang van die geval) moet aanvaar. Gedurende die proefjaar sal hy die kursus moet bywoon wat sowel die teorie van onderwystegniek as praktiese opleiding sal insluit. Hy sal ook proefonderwys moet gee.

(b) Aangesien die student 'n volwassene persoon (moontlik getroud) sal wees wat vir homself (en familie) moet sorg, sal

hy 'n salaris moet ontvang vir sy lewensbestaan gedurende die tydperk van opleiding - daarom die voorstel by (a) hierbo. Klasgelde sal ook betaalbaar wees.

(c) In sommige gevalle mag dit nodig wees om beurse van sê £50 - 150 per jaar toe te staan. Hieroor sal die Kommissie later genader word, maar dit word hier genoem om die beginsel daarvan te aanvaar.

(d) 'n Kontrak sal aangegaan moet word waarvolgens die student vir 'n tydperk sal dien wat minstens tweekeer so lank is as die duur van die voltydse kursus.

(e) Aan die end van die proefjaar, of, indien moontlik, vroeër sal die Kollege verslag doen of die student geskik is vir aanstelling as vakonderwyser of tegniese onderwyser.

(f) By suksesvolle voltooing van die kursus sal 'n aanpassing van salarisskaal ten opsigte van die addisionele kwalifikasie verwerf, oorweeg word indien die student gekies word vir aanstelling as vak - of tegniese onderwyser.

7. Die Departement beoog ook die toelating tot bogemelde kursusse van vakonderwysers wat nog in hulle proefjaar dien of hulle proefdiens so pas voltooi het en wat die Departement se mening belowend is. Diè wat nie die kursus met sukses voltooi nie sal teruggeplaas word na hulle vorige betrekkings sonder enige spesiale aanpassing van salaris soos in paragraaf 6.(f) hierbo. Die tydperk van bywoning van die kursus sal egter gereken word as diens vir gewone salarisverhogings.

8. Om uitvoering aan hierdie skema te gee, sal dit nodig wees om vir voltydse opleiding 20 betrekkings van assistent-vakonderwyser en 20 betrekkings van (tegniese) onderwyser volgens salarisskale binne die perke £435 x 25 - 860 en £435 - 1060 onderskeidelik op die diensstaat te skep en graag

ontvang ek die aanbeveling van die Kommissie hiervoor.

9. Die Departement wil graag die kursusse indien moontlik aan die begin van 1958 instel en daar sal dus sonder versuim voortgegaan moet word met die voorlopige reëlings, werwing van kandidate, ens. 'n Spoedige besluit sal derhalwe gewaardeer word.

J.J.P. Op't Hof.

Sekretaris van Onderwys, Kuns en Wetenskap.

Department of Education, Arts and Science.

12/10/57.

The Secretary,

The Public Service Commission.

Training of Trade and Technical Teachers for Service in Technical Colleges and Vocational Schools.

1. Because of the growing demand for trained tradesmen and the rapid developments in industry, it is urgently necessary to extend the existing facilities for training tradesmen, not solely to train more tradesmen but also to improve the training.

2. The time has come when something positive in this direction must be done, but with the available staff it is an impossible task. It is obvious that the training at technical colleges and vocational schools can only be effective if the technical teaching staffs themselves are trained and experienced tradesmen who have been trained in the techniques of teaching. In this respect the Department is experiencing difficulty in recruiting suitably qualified staff to fill existing vacancies and with the expansion in industry the problem is becoming still greater. Applicants for the vacant posts are mostly tradesmen who have had no training in teaching techniques. In other cases the candidates have had either insufficient experience in practice or have no aptitude for teaching. Those that have the necessary qualifications find the starting salaries unattractive being less than in industry.

3. As a result the Department does not procure the persons best suited to train others.

4. In addition to the above there is a dire shortage of technical teachers, that is, teachers able to handle the supplementary technical subjects like drawing, mechanics, strength of materials and applied mathematics. Even persons who have followed an ordinary degree course at a university are not capable without further study of teaching these subjects effectively.

5. To overcome these difficulties the Department envisages providing facilities for training teachers in full-time and part-time courses at the Pretoria Technical College. Full-time and part-time courses will extend over one year and two years respectively and the Department is desirous, in the case of the former course, of beginning by recruiting 40 full-time students per year who;

(a) in the case of assistant trade teachers must be in possession of the N.T.C. 111 certificate and have completed both an apprenticeship and a minimum of two years industrial experience in their trade. Since the Department has no other choice, these are proposed as the minimum requirements at this stage. When circumstances are more favourable, a raising of standards can be considered,

(b) in the case of technical teachers,

(i) must have passed the National Engineering Diploma, the National Building Diploma or the National Draughtsmen's Diploma and completed an apprenticeship, or

(ii) have passed the B.Sc. (Engineering) degree or

(iii) have passed a university degree with mathematics and/or physics as majors.

6. The additional conditions for acceptance will be :-

(a) in the first place the student shall accept an appointment as an assistant trade teacher (or as a technical teacher as the case may be) on twelve month's probation. During the probationary year he shall attend the course which includes both the theory and the practice of teaching. He shall undertake a teaching test.

(b) Seeing that the student will be an adult person (possibly married) who must provide for himself (and family), he ought to receive a salary to maintain himself during his training period - hence the proposal in (a) above. Tuition fees ought also to be paid.

(c) In some cases it may be necessary to grant bursaries of, say, £50 - £150 per year. The Commission will be approached in this matter later, but it is mentioned now in order to have the principle approved.

(d) A contract must be entered into to ensure that the student serves for a period at least twice as long as the duration of the full-time course.

(e) At the end of the probationary year, or earlier if possible, the College shall report on the suitability of the student for appointment as a trade teacher or technical teacher.

(f) On the successful completion of the course the student may receive a salary adjustment in respect of the additional qualification acquired if selected for appointment as a trade teacher or technical teacher.

7. The Department has in mind also the admission to the above-mentioned courses of trade teachers still in their probationary year or who have just completed their probationary period, who, in the opinion of the Department show promise. Those who do not complete the course successfuly will be sent back to their previous posts without any special salary adjustment as mentioned in paragraph 6.(f) above. The period of attendance at the course will, however, be reckoned as service for ordinary salary increment purposes.

8. In order to give effect to this scheme it will be necessary to create on the establishment 20 posts of assistant trade teacher and 20 of technical teacher on the salary scales £435 x 25 - 860 and £435 - 1060 respectively and I would be pleased to have the Commission's recommendation for these.

9. The Department would like to start these courses, if possible, at the beginning of 1958 and it will thus be necessary,

without delay, to go ahead with the provisional arrangements, the selection of candidates etc. An early decision would therefore be appreciated.

J.J.P. Op't Hof.

Secretary for Education, Arts and Science.

APPENDIX 111.

Mayfield School

Organisation

Each of the first three years consists of parallel groups of forms with a fair spread of ability in each form and is arranged as follows:

YEAR 1.

	A	B
Forms 1.	F.G.H.J.K.L.	M.P.Q.R.S.T.

YEAR 2.

	A	B	C
Forms 2.	Z.Y.X.W.V.T.	S.R.Q.	P.M.L.

YEAR 3.

	A	B	C
Forms 3.	T.S.Q.R.P.M.	L.K.J.	H.G.F.

N.B.

(i) A,B,C are used here as a rough assessment of the ability of each parallel group of forms.

(ii) In the first and second year all girls take one foreign language and for the last four years one or more forms have taken Russian as a first language.

(iii) As a result of their progress and attainment during the first year, some girls are moved from one group to another to enable them to work more quickly or more slowly as the case may be.

(iv) Most forms do not have more than 30 girls.

(v) For some subjects girls are put into divisions or sets across the forms and these usually contain less than 30 girls.

YEAR 4.

At the beginning of the fourth year the girls embark on their chosen individual courses after careful discussions with Parents, Form Tutors, the Year Mistresses, Youth Employment Officers, and the Head or Deputy Headmistress.

The present fourth year is arranged as follows:

	A	B	C
Forms 4.	E.F.G.H.J.K.	L.M.P.	Q.R.S.

N.B.

These are the forms in which the girls have worked for the first three years, but now most teaching groups cut across the forms.

Every girl has a basic timetable of 20 periods a week of Scripture, English, Mathematics, Music and P.E.

The remaining 20 periods are filled by subjects chosen by the girls from a wide range. The choice must include 4 or 2 periods each of History, Geography and at least one Science.

The subjects may be studied for G.C.E., C.S.E., R.S.A. and Pitman's Commercial Certificates, City and Guilds 150 Catering Examination, or Needlework examinations or as a continuation of a girl's general education.

YEAR 5.

The present fifth year is arranged as follows:

	A	B
Forms 5.	P.M.L.K.J.H.	G.F.E.D.C.Q.

In the fifth year the fourth-year pattern is usually continued although there may be some changes in the non-examination choice of subjects. This year there is a one-year Retail Distribution course with a strongly practical bias.

YEARS 6 and 7.

There are 5 Sixth forms each containing girls studying 'A' level, 'O' level, General and Secretarial courses.

There are 2 Seventh forms including about 75 students. Most of these are taking some 'A' level subjects and will go on to higher education at a university, college of education, teaching hospital or similar institution.

Social Organisation

The Form Tutor, who stays with her form for at least two years and usually for more, is directly responsible to the Head of the Year (Year Mistress) who acts as a sort of 'House Mistress' to the girls in her charge. As far as possible, Year Mistresses 'go up' with their year.

The Deputy Headmistress takes special responsibility for the third and fourth years.

Teaching Staff 1966-7

Full time, including Head and Deputy Head = 98

Part time = 25 + 3 Modern Language Assistants.

About three-quarters of the staff are graduates or have other kinds of three-year training.

Structure of Forms 1967-8

	A	B	C
1st year	*FGHJKL*	*MPQRST*	
2nd year	*ZYXWVT*	*SRQ*	*PML*
3rd year	*TSQRPM*	*LKJ*	*HGF*
4th year	*EFGHJK*	*LMP*	*QRS*
5th year	*PMLKJH*	*GFEDCQ*	
6th year	*1 2 3 4*		
7th year	*1 2*		

APPENDIX IV

Mayfield School

Fourth-year choices 1967-8

All girls will have some periods of R.K., English, Mathematics and P.E. The remaining periods, which will occupy over half of your time, should be filled by choosing subjects from the lists below. You can choose 5 units.

N.B.

1. *You are normally expected to choose History and Geography.*
2. *You must choose at least one Science subject.*
3. *If you have been studying a foreign language you will normally be expected to continue with it.*

GROUP 1 - Examination Subjects (G.C.E., C.S.E., R.S.A., City & Guilds etc.)

Additional English ($\frac{1}{2}$ unit)
R.K. (1 unit)
Geography (1)
History (1)

1st. Language
French (1) or
Russian (1) or
Spanish (1)

2nd. Language
German (1)
Latin (1)
French (1)

Beginners' German or Latin (1)
Physics + Chemistry (1)
Physics (1)
Chemistry (1)
Biology or Anatomy, Physiology and Hygiene (1)
Science (for C.S.E.) (1)
Commercial Subjects including Accounts (2)
Art (1)
Music (1)
Housecraft (for C.S.E.) (1)
Needlework (1)
Catering + French (3)
Technical Needlework ($2\frac{1}{2}$) + Art ($\frac{1}{2}$)

GROUP 11 - General Subjects

Art ($\frac{1}{2}$ or 1 unit)
Housecraft ($\frac{1}{2}$ or 1 unit)
Needlework ($\frac{1}{2}$ or 1 unit)
Home-making (1)
Woodwork ($\frac{1}{2}$)
Gardening ($\frac{1}{2}$)
Music ($\frac{1}{2}$)
Social Studies (1)
History ($\frac{1}{2}$)
Geography ($\frac{1}{2}$)
Human Biology (this includes child care and home nursing)(1) or
Science ($\frac{1}{2}$)
Typing (1)

NAME ..... *Form* ..... *Register No.* .....

GROUP 1		*GROUP 11*	
Subject	*Units*	*Subject*	*Units*
.....	.....	.....	.....

APPENDIX V

Mayfield School

Sixth-form Courses

There is no hard-and-fast dividing line between the fifth and sixth forms, and there is a considerable variety of Sixth-form work, but being in the Sixth form has certain satisfactions. Teaching groups are smaller, there is more private study in school time, and there is greater freedom and greater responsibility.

1. Ordinary level or C.S.E. or mixture of both, in the usual school subjects and also in such new ones as Geology, Economics, Anatomy, Physiology and Hygiene.

A student who follows such a course and gets reasonable qualifications may well be ready to leave at the end of the Sixth year, go into employment and perhaps be trained while at work and/or go to evening classes.

Some may decide to stay a second year in the Sixth and take a Secretarial course.

Others may continue the same kind of course but with some new subjects for a second year with perhaps one 'A' level subject, with a view to qualifying for admission to a College of Education, Nursing training, Physiotherapy, Horticulture, Commerce etc.

2. Advanced level G.C.E. in 2 or 3 subjects, together with non-exam work in complementary subjects.

This is a two-year course and students usually have seven or eight periods a week tuition in each of three specialist subjects. They are expected to work on their own at home and in the library or laboratory for at least another five hours a week for each subject.

Three good 'A' level passes are usually required as a minimum qualification for admission to a University or College of Advanced Technology. Two are increasingly asked for, for admission to a College of Education, although they are not compulsory.

These specialist subjects should not be undertaken unless the student and her teacher are reasonably confident that she can sustain the necessary interest and standard for the two years of the course.

The 21 or 24 periods of teaching for the 'A' level G.C.E. work

(usually three subjects) does not, however, make a fully educational course, and in addition all students must do some advanced work in subjects other than those which they will present for the G.C.E. examination.

It is not possible to do justice to an Advanced level course if time is to be given to retaking several Ordinary level subjects. A girl who needs to add considerably to her 'O' level certificate should take a General course for one year and postpone taking her Advanced level subjects until the end of the third instead of the second year in the Sixth.

3. Secretarial Course

There is a fairly intensive Secretarial course for students who already have obtained an examination qualification, preferably including English and a Modern Language. In addition to the skills of Shorthand and Typewriting, Commerce, Office Practice and Accounts are taught and general educational subjects are kept up. The Royal Society of Arts and Pitman's examinations are taken.

It is possible to carry two or three 'O' level subjects with this course; they are usually chosen from the following: English, Maths., a Foreign Language, Economics or History.

Some girls may take a part only of the Secretarial work with their general course. These students may study machine operating at a Technical College on one day a week.

1. General Course

All girls take the following subjects. Some groups will be doing examination work for G.C.E. or C.S.E.

Subject	No. of Periods	
General Discussion	1	
English	7	
French	5	or German 5
Mathematics	5	
A.P.H. (Anatomy, Physiol., Hygiene)	5	or Biology 5 or Gen. Science 5
Geology	5	or Geography 4
Economics	5	or History 4
and also 7 periods from the following:		
Art	2	or 3
Music	2	
Home Economics	3	
Dress	2	
Physical Education	2	
Physics with Chemistry	4	or R.K. 4 or Music 4

2. Advanced Level Course

The following subjects can be studied at 'A' level:

R.K.	French	Mathematics (Pure & Applied)	Physics	Music
English	Italian	Pure Mathematics	Chemistry	Art
History	German	Applied Mathematics	Biology	Dress
Geography	Spanish Latin		Geology	Housecraft

The subjects and combinations of subjects available will depend on the number of girls who are interested.

All girls take General Discussion (1 period) and English (2 periods).

Optional subjects: Two periods of one subject from each of the following three groups: (N.B. These choices are intended to balance the course and should be made with this in view, e.g. if the 'A' level course is linguistic, at least one option must be Science and Maths.)

(i) Art, Housecraft, Music, Dress, P.E. (Games).

(ii) Science and Maths. (probably half-year each), Modern Language other than Russian (probably French).

(iii) History, Latin, Russian, P.E., Geography.

3. Secretarial Course

General discussion	- 1 period
Commercial subjects	- 22 periods
English	- 5
Economics	- 5
French	- 5 or German 5 or Maths.

and also 2 periods of one subject chosen from the following:

Art, Music, Dress, Home Economics, P.E.

APPENDIX VI

Extract from Department of Education and Science Circular 10/65 on 'The Organisation of Secondary Education'

Main Forms of Comprehensive Organisation

There are a number of ways in which comprehensive education may be organised. While the essential needs of the children do not vary greatly from one area to another, the views of individual authorities, the distribution of population and the nature of existing schools will inevitably dictate different solutions in different areas. It is important that new schemes build on the foundation of present achievements and preserve what is best in existing schools.

Six main forms of comprehensive organisation have so far emerged from experience and discussion:

(i) The orthodox comprehensive school with an age range of 11-18.

(ii) A two-tier system whereby all pupils transfer at 11 to a Junior[1] comprehensive school and all go on at 13 or 14 to a Senior comprehensive school.

(iii) A two-tier system under which all pupils on leaving primary school transfer to a junior comprehensive school, but at the age of 13 or 14 some pupils move on to a senior school while the remainder stay on in the same school. There are two main variations: in one, the comprehensive school which all pupils enter after leaving primary school provides no course terminating in a public examination, and normally keeps pupils only until 15; in the other, this school provides G.C.E. and C.S.E. courses, keeps pupils at least until 16, and encourages transfer at the appropriate stage to the Sixth form of the senior school.

(iv) A two-tier system in which all pupils on leaving primary school transfer to a junior comprehensive school. At the age of 13 or 14 all pupils have a choice between a senior school catering for those who expect to stay at school well beyond the compulsory age, and a senior school catering for those who do not.

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1. The terms 'junior' and 'senior' refer throughout this Circular to the lower and upper secondary schools in two-tier systems of secondary education.

(v) *Comprehensive schools with an age range of 11 to 16 combined with sixth-Form Colleges for pupils over 16.*

(vi) *A system of middle schools which straddle the primary/secondary age ranges. Under this system pupils transfer from a primary school at the age of 8 or 9 to a comprehensive school with an age range of 8 to 12 or 9 to 13. From this middle school they move on to a comprehensive school with an age range of 12 or 13 to 18.*

The most appropriate system will depend on local circumstances and an authority may well decide to adopt more than one form of organisation in the area for which it is responsible. Organisations of types (i), (ii), (v) and (vi) produce schools which are fully comprehensive in character. On the other hand an organisation of type (iii) or (iv) is not fully comprehensive in that it involves the separation of children of differing aims and aptitudes into different schools at the age of 13 or 14. Given the limitations imposed by existing buildings such schemes are acceptable as interim solutions, since they secure many of the advantages of comprehensive education and in some areas offer the most satisfactory method of bringing about reorganisation at an early date. But they should be regarded only as an interim stage in development towards a fully comprehensive secondary organisation.

BIBLIOGRAPHY

1. Published Works

Bantock, G.H. : "Education in an Industrial Society". London. Faber and Faber. 1963.

Behr and MacMillan : "Education in South Africa". Pretoria. J.L. van Schaik Ltd. 1966.

Bruun, Ulla-Britta. : "Nursery Schools in Sweden". Stockholm. The Swedish Institute. 1962.

Coetzee, J. Chr. : "Onderwys in Suid Afrika". Pretoria. J.L. van Schaik Ltd. 1958.

Conant, James B. : "The Comprehensive High School". New York. McGraw Hill Book Co. 1st. Edition. 1967.

Dahllöf, Zetterbund and Obery. : "Secondary Education in Sweden". Stockholm. National Board of Education. 1966.

Daniels, Robert V. : "Studying History. How and Why". Englewood Cliffs, New Jersey. Prentice-Hall Inc. 1966.

Dewey, J. : "Democracy and Education". New York. The Macmillan Co. 1942.

du Toit, P.S. : "Onderwys in Kaapland". Pretoria. J.L. van Schaik Ltd. Tweede Hersiene en Vermeerderde Druk. 1951.

Green, L.G. : "Karoo". Cape Town. Howard Timmins. 1st. Edition. 1955.

Halsey, A.H. (Editor) : "Ability and Educational Opportunity". Report of Conference organised by the Office for Scientific and Technical Personnel. Sweden. 11th-16th June, 1961. O.E.C.D.

Hasen, Torsten. : "School Reform in Sweden". U.S. Department of Health, Education and Welfare. Washington, D.C. 1961.

Hutchinson and Young. : "Educating the Intelligent". Harmondsworth, Middlesex, England. Penguin Books. 1962.

Immelman, R.F.M. : "Men of Good Hope. (The Romantic Story of the Cape Town Chamber of Commerce, 1804-1954)". Cape Town. Cape Town Chamber of Commerce. 1955.

Jacks, M.L. : "The Education of Good Men". London. Victor Gollanz Ltd. 1956.

Jones, H.E. : "Developments in Education with Special Reference to Technical Education". Durban. Natal Technical College. 1920.

Kandel, I.L. : "The New Era in Education". London. George G. Harrap & Co. Ltd. 1966.

Keller, Franklin J. : "Principles of Vocational Education". Boston. D.C. Heath & Co. 1948.

Livingstone, Sir Richard. : "Some Tasks for Education". London. Oxford University Press. 1946.

Loram, C.T. : "The Education of the South African Native". London. Longman, Green & Co. 1917.

McKerron, M.E. : "A History of Education in South Africa, 1652-1932". Pretoria. J.L. van Schaik Ltd. 1934.

McClelland, Axelson and Esterhuizen. : "Pietermaritzburg Technical College, 1910-1960". Pietermaritzburg. City Printing Works. 1960.

Malherbe, E.G. : "Education and the Poor White". Report of the Carnegie Commission. Stellenbosch. Pro Ecclesia Drukkery. 1932.

Malherbe, E.G. : "Education in South Africa, 1652-1922". Cape Town. Juta and Co. Ltd. 1925.

Marklund S. and Söderberg P. : "The Swedish Comprehensive School". London. Longmans. 1967.

Marquard, Leo. : "The Story of South Africa". London. Faber & Faber. 1954.

Martinius, M.E. : "A Sketch of the Development of Rural Education (European) in the Cape Colony (1652-1910)". Grahamstown. Grocott and Sherry. 1922.

Miles, Margaret. : "Comprehensive Schooling". London. Longman, Green and Co. Ltd. 1st. Edition. 1968.

Muller, C.F.J. (Editor) : "Five Hundred Years. A History of South Africa". Pretoria. University of South Africa. Academica. 1969.

Narbeth, B.M. : "Some Notes upon Technical Education". Durban. P. Davis & Sons Ltd. 1915.
Nisbet, Stanley. : "Purpose in the Curriculum". London. University of London Press. 1957.
Orring, Jonas. : "The School System of General Education in Sweden". Stockholm. The Swedish Institute. 1968.
Paderborn. : "Berufsausbilding in Industria, Handel, Handwerk der Bundesrepubliek Deutchland". Bonn. Ferdinand Schoningh. 1960.
Pedley, Robin. : "The Comprehensive School". Harmondsworth, Middlesex, England. Penquin Books. 1963.
Pells, E.G. : "The Story of Education in South Africa, 1652-1938". Cape Town. Juta and Co. 1938.
Rees, Wyn. : "The Natal Technical College, 1907-1957". Durban. University of Natal Press. 1957.
Rubenstein and Simon. : "The Evolution of the Comprehensive School, 1926-1966". London. Routledge and Kegan Paul. 1969.
Russell, Bertrand. : "Education and the Social Order". London. George Allen and Unwin Ltd. Sixth Impression. 1961.
Sellick, W.S.J. : "Uitenhage Past and Present". A Souvenir of the Centenary 1804-1904. Uitenhage. Uitenhage Times Office. 1904.
Smuts, Adriaan. : "The Education of Adolescents in South Africa". Cape Town. Juta and Co. Ltd. 1937.
Spencer, F.H. : "The Technical Colleges of South Africa". New York. The Carnegie Corporation. 1937.
Warren, Hugh. : "Vocational and Technical Education". Monographs on Education - VI. Paris. Unesco. 1967.
Whitehead, A.N. : "The Aims of Education and Other Essays". London. Williams and Norgate Ltd. 1947.
Wulfsohn, B. : "'n Vergelykende Studie van Beroepsonderwys". Kaapstad. Nasionale Boekhandel. 1959.

2. Acts

The South Africa Act, 1909.
The Financial Relations Act, No.10 of 1913.
The Financial Adjustments Act, No. 5 of 1922.
The Provincial Subsidies and Taxation Powers Amendment Act, No. 46 of 1925.
The Agricultural Schools Transfer Act, No.30 of 1937.
Special Classes and Schools Act, No.9 of 1948.
The Vocational Education Act, No.70 of 1955.
The Republic of South Africa Constitution Act, No.32 of 1961.
The National Advisory Education Council Act, No.86 of 1962.
The National Education Policy Act, No.39 of 1967.
The Education Services Act, No.41 of 1967.

3. Ordinances - Cape Provincial

No.11 of 1917.
No. 5 of 1919
No. 5 of 1921
No.25 of 1968 (amended 1969)
No. 5 of 1970

4. *Articles*

A. *Newspaper Articles*

Cape Argus	*25th. October, 1892.*
	14th. December, 1892.
	15th. December, 1892.
	31st. October, 1894.
	17th. December, 1897.
	21st. December, 1911.
Cape Times	*24th. October, 1910.*
	16th. July, 1914.
	4th. November, 1970
De Zuid Afrikaan	*1 Julie, 1915.*
Educational News	*March, 1902.*
Die Oosterlig	*26 Oktober, 1967. "So het die H.T.S. op Uitenhage gegroei".*

Cape Church Monthly and Parish Record, October, 1909.

B. *Journals*

Psychological Services, Cape Education Department. "Rehabilitasie van Moeilike Aanpasbare Leerlinge in Skole van die Kaapse Onderwysdepartement". Rehabilitation in South Africa. June 1964. Vol. 8. No. 2.

Frankel, S. Herbert and Hezfeld, H. : "An analysis of the growth of the national income of the Union in the period of prosperity before the War". South African Journal of Economics. Vol. 12, No.12. June, 1944.

F.J. Potgieter. : "A modern approach to historical pedagogy". South African Journal of Pedagogy. Vol. 1. No. 2. December, 1967.

5. *Cape Archives*

The following official correspondence of the Cape Education Department (S.G.E.'s letters) :-
1/213, 1/215, 1/424, 1/877, 1/1255, 1/1722, 2/48, 13/31.
The following inspection reports of the Cape Education Department :-
2/47, 2/59, 13/31.
The Cape Government Gazette for 17th. October, 1893. (No. 1014)

6. *Journal*

Skool Joernaal van die Huishoudskool, Riebeek Wes, Januarie 1932 - Maart 1968.

7. *Letters*

To author from :-
Principal J.A. Mostert of Augsburg Agricultural High School, Clanwilliam. 16th. February, 1970.
Principal A. Teubes of Boland Agricultural High School, Windmeul. 17th. February, 1970.

Principal Miss Gerber of Adelaide Housecraft High School. 6th August, 1969.
The Registrar of the Cape College for Advanced Technical Education. 10th. March, 1970.
Mr. J.M. Grobler, Senior Subject Inspector of Agriculture, Cape Education Department. 15th. April, 1970.

From the Minister of National Education to the Administrator of the Cape Province, 25th. October, 1967.
From the Secretary, Department of Higher Education to Director, Cape Education Department, 9th. December, 1969.

8. *Magazines*

Commemoration Magazine, Commercial High School, Paarl, 1929-1950.
Jubilee Magazine, Marlow Agricultural High School, 1955.
Worcester Technical College, 1941-1957.
Tygerberg Commercial High School, Commemoration Magazine, 1960.
Oakdale Agricultural High School, 1964.
Jubilee Magazine, Northern Cape Technical College, 1964.
Commemoration Magazine, Worcester Commercial High School, 1966.

9. *Minutes of Meetings*

Cape School Board, 4th. December, 1907.
Cape School Board, 1st. December, 1915.
National Technical and Commercial Examinations Advisory Committee, 8th. February, 1927.
Natal Technical College Council, 20th. April, 1933.
Departmental Examinations Committee, Cape Education Department, 19th. and 20th. March, 1970.

10. *Handbooks and Calendars*

National Housewife's Certificate. 1923. Government Printer.
Domestic Science Teachers' Certificate. Handbook G. Section III. 1929. Government Printer.
National Trade Instructors' Diplomas. 1927. Government Printer.
National Teachers' Diplomas, 1959 and 1968. Government Printer.
National Technical Teachers' Certificates 1930, 1936, 1939, 1946, 1952, 1961. Government Printer.
Domestic Science Syllabuses and Examinations, 1940 and 1944. Government Printer.
Home Economics Syllabuses and Examinations. 1965. Government Printer.
National Commercial Examinations 1930, 1932, 1934, 1938, 1939. Government Printer.
National Commercial, Art and General Education Subjects. 1945, 1947, 1948, 1951, 1955, 1962, 1968. Government Printer.
National Technical Examinations. 1936, 1945, 1951, 1963. Government Printer.
Apprenticeship in the Printing Industry. 1947. Government Printer.
National Bureau of Educational and Social Research. Information Series 3. "Education in South Africa" 1961. Government Printer.

Cape Education Department
The Primary School. Pamphlet E301.
The Junior Secondary Course. E 321/0/1963.
The Senior Secondary Course. E 322/0/1965.

University of Stellenbosch. Calendar. 1970.
University of Cape Town. Faculty of Education. 1970.

11. *Files. Cape Provincial Education Department*

L1/83/12/04
L3/83/12/2
L3/80/12/1
L3/162/38/1,2 and 3
L3/126/69/1,2 and 3
L3/56/39/1, 2 and 3
L3/32/125/1,2 and 04

12. *Year Books*

Year Book and Guide to Southern Africa. Cape Town. Howard Timmins. 1965.
Statistical Year Book. Pretoria. Bureau of Census and Statistics. 1966.
State of South Africa. Johannesburg. Da Gama Publishers. 1970.

13. *Interviews*

Mr. W.J. Moylen. 18th. February, 1966.
Dr. E. Phillips, University of Natal, Durban. 1st. July, 1966.
Mr. E. Champkin. University of London. G.C.E. 'O' and 'A' level Examinations. 26th. May, 1967.
Dr. J.J. Op t' Hof. Secretary for Cultural Affairs. 5th. August, 1970.

14. *Reports*

Cape Provincial Education Commissions 1879, 1891 and 1912.
Conference on Technical, Industrial and Commercial Education, UG No.2 of 1912.
Notes on the Estimates. (Unpublished) Finance Section. Cape Provincial Administration.
Education Reports of Cape Provincial Education Department, 1854, 1890, 1893, 1895, 1896, 1897, 1898, 1899, 1902, 1909, 1922, 1946, 1952, 1953, 1956, 1958, 1967.
Reports of the Union Education Department and/or the Department of Education, Arts and Science, 1910, 1912, 1913, 1914 and 15, 1917, 1918, 1919, 1920, 1923, 1925, 1926, 1927, 1928, 1929, 1932, 1933 and 34, 1935, 1938, 1939, 1941-45, 1946, 1948, 1949, 1950, 1951, 1952, 1953 and 54, 1955, 1957.
Report of the University Commission, 1914. UG 42 of 1914.
Report of the Conference on Industrial Education, Sept. 1916.
Report of the Provincial Administration Commission, 1916. UG 45 of 1916.

Report of the Committee on Industrial Education. UG 9 of 1917.
Report of the Committee on Agricultural Education, 1922. UG 26 of 1922.
Report of the Provincial Finances Commission 1923. UG 19 of 1923.
Report on Industrial Schools and Industrial Departments in the Cape Province. CP 2 of 1923.
First Report of the Education Administration Commission 1923. UG 41 of 1923.
Second Report of the Education Administration Commission 1924. UG 19 of 1924.
Report of National Technical and Commercial Examinations Advisory Committee, January 1927. E 64/2/27.
The Education of the Adolescent (Hadow Report). London. H.M.S.O. 1927. Reprinted 1960.
Report of Unemployment Investigation Commission, 1932.
Report of Conference on Rural Education, 1934. UG No.29 of 1934.
Report of the Inter-departmental Committee on the Demarcation of the Activities of Technical Colleges, Trade Schools and High Schools. E 53/7/15 of 29/5/40.
Report of the Commission on Technical and Vocational Education. UG 65 of 1948.
Education in a Technological Society. UNESCO. Paris. 1950.
Report of the Central Advisory Council for Education, 15 to 18. London. H.M.S.O. 1950.
Report of Departmental Psychologist to Superintendent-General of Education, 23rd. November, 1953. L 3/56/39/2.
Technical Education. Command 9703. London. H.M.S.O. 1956.
Technical and Vocational Education. Recommendations by U.N.E.S.C.O. (Paris) and the International Labour Organisation (Geneva). 1964.
Report of Royal Commission of Inquiry on Education in the Province of Quebec. 4th. February, 1965. Part 2.
Teaching in Comprehensive Schools. A second report. The Incorporated Association of Assistant Masters. Cambridge. The University Press. 1967.
Verslag van die Komitee vir Beroepsgerigte Onderwys van die Meisies tot en met St. X en/of Matrikulasie. Nasionale Adviserende Onderwysraad. 18de Maart, 1968.
Report of the Committee on Vocationally-directed Education for Boys up to Std. X or Matriculation. National Advisory Education Council. October, 1968.
Report of the Commission of Enquiry into the Method of Training for University Degrees in Engineering, Part III. RP 74/1968. Pretoria. Department of Higher Education.
The Certificate of Secondary Education. Reports on Education. London. Department of Education and Science.

15. *Speeches*

Dr. E.L.G. Schnell. "Differentiated Education for the Various Ability Groups in the Junior Secondary School". To Cape Education Department Inspectors' Conference 28th. March - 1st. April, 1955. L 13/0/12/2.
Mr. D.J. Liebenberg. Superintendent-General of Education. 24th. March, 1961. Opening of Westcliff Special Secondary School.
Principal D.F. Abernethy. Pretoria Boys' High School. Prize Giving. 29th. November, 1961.
Dr. G.J.J. Smit. Superintendent-General of Education. 19th. March, 1965. Opening of Batavia Special Secondary School.
Advocate J.F.W. Haak. Opening of the Annual Conference of the South African Association for Technical and Vocational Education. Kimberley. 3rd. April, 1965.

16. Theses

Heyns N.J. : "Die Heterogeneteit van die Spesiale Klas". Stellenbosch. M.Ed. Unpublished.

Heyns N.J. : "Die Spesiale Klasse van die Kaapse Onderwysdepartement". Stellenbosch. D.Ed. Unpublished.